

## *Minute Action*

AGENDA ITEM: 13

**Date:** July 7, 2010

**Subject:** Interstate 10 (I-10)/Cherry Avenue and Interstate 10/Citrus Avenue Interchange Projects.

**Recommendation:** \* 1. Approve Amendment No. 1 to Contract C08050 with T.Y. Lin International for Design Engineering Services for Cherry and Citrus Avenue Interchanges on I-10 increasing the original contract amount of \$9,000,000 by \$1,709,088 for a new contract value of \$10,709,088.

2. Approve Amendment No. 1 to Design Cooperative Agreement C08055 with the City of Fontana and the County of San Bernardino for the I-10/Cherry Avenue Interchange increasing the original contract amount of \$5,065,263 by \$770,248 for a new contract value of \$5,835,111, with SANBAG's contribution increasing by \$277,289 for a total contribution of \$2,100,784.

3. Approve Amendment No. 1 to Design Cooperative Agreement C08053 with the City of Fontana and the County of San Bernardino for the I-10/Citrus Avenue Interchange increasing the original contract amount of \$3,934,737 by \$938,840 for a new contract value of \$4,873,577, with no additional SANBAG contribution.

**Background:** These are amendments to an existing design contract and two existing design cooperative agreements.

\*

*Approved  
Board of Directors*

*Date:* \_\_\_\_\_

*Moved:* \_\_\_\_\_ *Second:* \_\_\_\_\_

*In Favor:* \_\_\_\_\_ *Opposed:* \_\_\_\_\_ *Abstained:* \_\_\_\_\_

*Witnessed:* \_\_\_\_\_

In May 2008, SANBAG entered into design cooperative agreements C08053 and C08055 with the County and City respectively. These agreements define the funding share, responsibilities and stipulations related to the final design phase for both interchanges. Under these agreements the City and the County funded more than their fair share of the design phase of these projects. These design agreements state that a future agreement will be entered into to balance out the difference between the funding amount as defined by the SANBAG Nexus Study percentages and the actual amount paid. Similarly, Right-of-Way Agreements C10191 and C10192 approved by the Board of Directors in March and April 2010, respectively, were also executed to define the funding shares, responsibilities and stipulations for the right-of-way acquisition work for both projects. Also stated within these agreements, each party recognizes that any outstanding balances between the SANBAG Nexus Study percentage amount and the actual amount paid will be addressed in the future construction cooperative agreement.

On February 8, 2008 the Board of Directors approved Contract No. C08050 with T.Y. Lin International for Design Engineering Services for Cherry Avenue and Citrus Avenue Interchanges on Interstate I-10. During the design phase, additional work to complete the plans, specifications and estimate (PS&E) for these projects was identified. In order to assure that the milestone dates included in Trade Corridor Improvement Fund (TCIF) Baseline Agreements are met, the work was incorporated so as to not impact the schedule and potentially jeopardize the funding. Details regarding the additional work are summarized in the following paragraphs.

During the course of the interchange design work that is being managed by SANBAG, in coordination with County, City and Caltrans, the project team has identified several items which are outside the original scope of work and which have exceeded the allowances provided in the original contract. The subject amendment is to address additional design and/or field work related to various tasks including geometric design; additional design exception fact sheets; "Life Cycle Cost Analysis" for pavement design; design for the Citrus/Slover intersection; revising Cherry Avenue Geometric Approval Drawings; performing supplemental field surveys; supplemental drainage analysis and redesign; utility coordination and design beyond what was initially anticipated; potholing above allowances; legal descriptions and revising right-of-way requirement maps to reflect the changed geometrics; geotechnical tasks; landscaping project development; and general project management associated with the both listed work.

The design changes that were beyond the original scope include:

- The configuration of the Cherry westbound on-ramp was changed from a circular high-speed loop ramp to a “D” configuration on-ramp to comply with a geometric standard change.
- The design for the Citrus/Slover intersection was previously part of a separate project, however, this local project was suspended. Since the Citrus interchange improvements require this intersection work to be completed, it was required to be incorporated and designed as part of the interchange project.
- The drainage system for both interchanges was more complex than originally assumed, resulting in the need for additional evaluation and revisions to the drainage system including the design of bore/jacked pipes under the highway.
- The allowances that were anticipated in the original fee for utility potholing were exceeded. Verifying the utilities during design will save time and money during construction.
- Landscape project development work was not included in the original contract, but is required to be in compliance with the environmental document. This item is included in the change order as an option, as it has not been determined whether the landscape construction will be included in the interchange construction contract.
- The I-10 High Occupancy Vehicle (HOV) project preliminary engineering analysis identified that the addition of a lane in each direction would not provide sufficient capacity to accommodate the projected traffic volumes. Given this, the geometric issues to accommodate two additional mainline lanes in each direction were outlined, analyzed and reviewed with the Project Development Team (PDT) and Caltrans staff to determine the most appropriate direction forward to accommodate the ultimate mainline freeway. Considerations included avoiding future changes on this time sensitive project; elimination of additional design and construction costs in the future when construction costs may not be so low; and avoiding future impacts to the public if the construction to modify the interchange was performed as a separate project. The design has been revised to accommodate two lanes in each direction.
- An analysis was performed to ensure we had the most cost efficient design. From this review, the design team determined some alternatives to reduce construction costs of the structures and roadway components to provide cost savings at the same time minimizing the right-of-way requirements. The results included reducing the amount of retaining structures; reduced earthwork and drainage work; and reduced pavement

by changing the on-ramps from 3-lane to 2-lane configuration, while not impacting the operations of the facility.

The overall construction costs impacts associated with these changes are being refined, but the initial estimate has identified that there will be minimal impact on the construction budget for the two interchanges, with the potential for a savings.

The revisions to the design of the project described above required additional services to redo some of the work already completed. Within the amendment, Attachments A and B included herein, is a detailed breakdown of additional work required along with the hours and costs associated with this request. A detailed background and scope of work for each item is also attached.

Approval of these staff recommendations affect the subject projects funding as follows:

Recommendation 1:

Approve Amendment No. 1 to Contract C08050 with T.Y. Lin International for Design Engineering Services for Cherry and Citrus Avenue Interchanges on I-10 increasing the original contract amount of \$9,000,000 by \$1,709,088 for a new contract value of \$10,709,088.

Recommendation 2:

Approve Amendment No. 1 to Contract C08055 with the City of Fontana and the County of San Bernardino for the I-10/Cherry Avenue Interchange increasing the original contract amount of \$5,065,263 by \$770,248 for a new contract value of \$5,835,111. SANBAG's contribution is increasing by \$277,289 for a total contribution of \$2,100,784. The County's contribution is increasing by \$492,958, for a total contribution of \$3,734,727.

Based on the SANBAG Nexus Study SANBAG's share is 64.6% of the project which equates to total contribution of \$3,769,482; the County's share is 22.7% for a total contribution of \$1,324,570; and the City's share is 12.7% for a total contribution of \$741,059. The outstanding balances between the SANBAG Nexus Study percentage amount and the actual amount paid will be addressed in the future construction cooperative agreement.

Recommendation 3:

Approve Amendment No. 1 to Contract C08053 with the City of Fontana and the County of San Bernardino for the I-10/Citrus Avenue Interchange increasing the original contract amount of \$3,934,737 by \$938,840 for a new contract value of \$4,873,577 SANBAG is providing no additional contribution. The County's contribution is increasing by \$9,388, for a total contribution of \$48,735. The City's contribution is increasing by \$929,452, for a total contribution of \$4,824,842.



Based on the SANBAG Nexus Study, SANBAG's share is 64.6% of the project which equates to total contribution of \$3,002,123; the County's share is 0.2% for a total contribution of \$97,472; and the City's share is 38.2% for a total contribution is \$1,861,706. The outstanding balances between the SANBAG Nexus Study percentage amount and the actual amount paid will be addressed in the future construction cooperative agreements.

**Financial Impact:** The recommendation is consistent with the fiscal year 2010/2011 budget. The funding for these agreements is Measure I Major Projects, Task No. 82611000.

**Reviewed By:** This item was reviewed and recommended for approval (12-0-1; Abstained: Supervisor Derry) by the Major Projects Committee on June 10, 2010. SANBAG Counsel has reviewed and approved the agreements as to form.

**Responsible Staff:** Garry Cohoe, Director of Freeway Construction

SANBAG Contract Amendment No. **C08050-1**

by and between

San Bernardino County Transportation Authority and T.Y. Lin International  
for Design Engineering Services for Cherry Ave and Citrus Ave Interchanges on Interstate I-10

**FOR ACCOUNTING PURPOSES ONLY**

<input checked="" type="checkbox"/> Payable	Vendor Contract # _____	Retention:	<input type="checkbox"/> Original
<input type="checkbox"/> Receivable	Vendor ID <u>SBCO/FONT CI</u>	<input type="checkbox"/> Yes _____ % <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Amendment

Notes: This amendment is

Original Contract:	\$ <u>8,849,997</u>	Previous Amendments	\$ _____
		Previous Amendments	\$ _____
		Contingency / Allowance Total:	
Contingency / Allowance Amount	\$ <u>150,003</u>	Current Amendment:	\$ <u>1,553,716</u>
		Current Amendment Contingency / Allowance:	\$ <u>155,372</u>

Contingency Amount requires specific authorization by Task Manager prior to release.

**Contract TOTAL ► \$ 10,709,088**

\* Funding sources remain as stated on this document unless and until amended by proper authority. Funding sources are those which are ultimately responsible for the expenditure.

▼ Include funding allocation for the original contract or the amendment

Main Task/Project	Level 1	Level 2	Cost Code/Object	Grant ID/Supplement	Funding Sources/ Fund Type (Measure I, STP, CMAQ, etc.)	Amounts for Contract Total or Current Amendment Amt
826	610	000	52005	99006	MSI Valley – Fwy Interchange	\$ <u>277,289</u>
826	610	000	52005	41404	Local SBCO-Cherry	\$ <u>492,958</u>
826	610	000	52005	41403	Local SBCO - Citrus	\$ <u>9,388</u>
826	610	000	52005	51801	Local FONT CI	\$ <u>929,452</u>

Original Board Approved Contract Date: 2/6/08 Contract Start: 2/6/08 Contract End: 12/31/11New Amend. Approval (Board) Date: 7/7/10 Amend. Start: 7/8/10 Amend. End: 12/31/11

Allocate the **Total Contract Amount** or **Current Amendment** amount between **Approved Budget Authority** in the current year and **Future Fiscal Year(s) Unbudgeted Obligation**.

<b>Approved Budget Authority ►</b>	Fiscal Year: <u>10/11</u> \$ <u>1,709,088</u>	<b>Future Fiscal Year(s) – Unbudgeted Obligation ►</b>	\$ <u>0</u>
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☒ Budget authority for this contract currently exists in Task No. 826 (C-Task may be used here.).  
☐ A budget amendment is required. A Budget Amendment Request is attached.

**CONTRACT MANAGEMENT**

Check all applicable boxes:

☒ Intergovernmental    ☐ Private    ☐ Federal Funds    ☐ State/Local Funds  
☐ Disadvantaged Business Enterprise (DBE)    ☐ Underutilized DBE (UDBE)

Task Manager: Garry CohoeContract Manager: Chad Costello

Task Manager Signature

Date

Contract Manager Signature

Date

Chief Financial Officer Signature

Date

**AMENDMENT NO. 1**

**CONTRACT NO. C08-050**

**Agreement By And Between**

**SAN BERNARDINO ASSOCIATED GOVERNMENTS/  
SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY**

**and**

**T.Y. Lin International**

This AMENDMENT No. 1 to CONTRACT No. C08050 entered into this 7<sup>th</sup> day of July, 2010 by and between the firm of **T.Y. Lin International** (hereafter called CONSULTANT) and the San Bernardino Associated Governments/San Bernardino County Transportation Authority (hereafter called AUTHORITY):

WITNESSETH,

WHEREAS, AUTHORITY, under Contract No. C08050 ("Contract"), has engaged the services of CONSULTANT to provide professional services for Engineering Services for Cherry Ave and Citrus Ave Interchanges on Interstate I-10; and

WHEREAS, the parties hereto desire to amend the aforesaid Contract to increase the contract amount and amend the scope of work for CONSULTANT.

NOW, THEREFORE, in consideration of the terms and conditions set forth herein, CONSULTANT and AUTHORITY do hereby agree as follows:

CN 08050-1  
TN 82610000

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1. The not-to-exceed cost of the Contract shall be increased by \$1,553,716, for a new not-to-exceed total Contract amount of \$10,531,608 excluding contingencies. The cost increase shall include compensation for all additional Contract work to be performed by CONSULTANT and subconsultants in accordance with the scope of work and cost proposal in Attachment A to this Amendment.
2. Except as amended by this Amendment, all other provisions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Contract on the day and year below written, but effective as of the day and year first set forth above.

**T.Y. Lin International**

By: \_\_\_\_\_

Date: \_\_\_\_\_

**San Bernardino Associated Governments**

By: \_\_\_\_\_

Brad Mitzelfelt, President  
SANBAG Board of Directors

Date: \_\_\_\_\_

**APPROVED AS TO LEGAL FORM:**

By: \_\_\_\_\_

Jean-Rene Basle  
SANBAG Counsel

**TYLIN**INTERNATIONAL  
engineers | planners | scientists

C08050-1  
ATTACHMENT A

May 10, 2010

Mr. Chad Costello, PE  
SANBAG  
1170 W. Third Street, 2<sup>nd</sup> Floor  
San Bernardino, CA 92410

Subject: **Cherry and Citrus Avenue Interchanges at I-10  
Request for Change Order No. 3  
Redesign for Ultimate, Widened I-10 Mainline Freeway and  
Various Revisions**

Dear Mr. Costello:

T.Y. Lin International (TYLI) is submitting this change order request to address additional design and/or field work related with the interchanges as well as some redesign work that is required in order to allow for the ultimate, widened I-10 Mainline Freeway section ("ultimate freeway section") at the Cherry and Citrus Interchanges. During the course of our design work, the project team has identified several items which are outside the original scope of work, or which have exceeded the allowances provided in the original project effort. These items are included in this request as well.

In December 2009 and January 2010 meetings with Caltrans Headquarters and District staff, the PDT discussed and proceeded to modify the interchanges to allow for the ultimate freeway section to be constructed in the future with minimal "throwaway" costs. At the time of the decision, 60% roadway and structures design for both interchanges had been substantially completed. However, the basis for this discussion was to avoid future change on a time sensitive project and to eliminate additional design and construction costs at a future time when construction costs may not be so low. Additionally, future impacts to the general public would be avoided for this work if it were performed at this time for this project. Thus the incorporation of the ultimate freeway section transpired via a significant redesign effort.

At the same time, as the design work progressed, various issues arose which were not included in the original scope of work, or have required deviation from the preliminary

Attachment A  
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design provided in the respective Project Reports. These include such items as the Citrus/Slover intersection, conversion of the Cherry loop ramp to a "D" configuration, revisions to the planned drainage system, and preparation of additional fact sheets. Also, allowances made in the original fee for such items as field surveying and potholing were exceeded.

Attached is documentation providing a detailed breakdown of the manhours and costs associated with this request. A brief description is provided below for each category of the extra work items. A detailed background and scope of work for each item is also attached.

#### CHANGE ORDER ITEM DESCRIPTION

1. *Ultimate Freeway Section Redesign*\_Revision to roadway, traffic, electrical, bridge, retaining wall, and I-10 Channel plans for both Citrus and Cherry Avenues, and preparation of additional fact sheets.
2. *Life Cycle Cost Analysis (LCCA)*\_Preparation of LCCA reports for both interchanges (required by Caltrans).
3. *Citrus/Slover Intersection*\_Concept studies, planning and coordination meetings, refinement of alternatives, and preparation of final design, and legals and plats to incorporate intersection into PS&E package.
4. *Cherry GAD Revisions*\_Modification of design provided on Cherry Avenue Geometric Approval Drawings to correct deficiencies, preparation of additional fact sheets.
5. *Field Surveys*\_Provide drainage and channel ties, flag right-of-way lines, locate building corners, and profile property lines for relocated soundwall.
6. *Drainage Analysis and Redesign*\_Analysis of drainage options after original concept from Project Report proved unworkable. Development of drainage alternatives, and design of jacked pipe system. Modifications to drainage design to accommodate ultimate freeway section.
7. *Utility Coordination and Design*\_Additional requirements for utility coordination, including negotiation of previously unidentified need for utility corridor, and substantial effort for Utility Plan preparation.
8. *Potholing*\_Additional potholes and survey in UPRR and Caltrans right-of-way, above and beyond original 10 holes assumed per interchange.
9. *Legal Description and Map Revisions*\_Revisions to previously prepared legals and plats, calculations, and Hardcopy and Appraisal Maps, required to support accelerated right-of-way process ahead of 60% design, incorporating changes as they have been identified.
10. *Geotechnical*\_Unanticipated cost for night field work after restrictions imposed by Fontana, report revisions required for adjustments in structure locations caused by

accommodation of ultimate freeway section, and field and laboratory work to provide borings and recommendations for new jacked pipe drainage concept.

11. *Landscape PA&ED (Optional)*\_Requirement from Caltrans to prepare separate PA&ED for each interchange to document "follow-on" landscape construction packages. This item is outside the original scope but is optional, as it may be completed by Caltrans itself.
12. *General Project Management*\_Additional meetings, agency coordination, and oversight and coordination of team activities as a result of redesign effort.

The following table summarizes the individual extra work items, and the change order manhours associated with the design team members for each.

CO Item	TYLI	PTG	AE	BE	LCI	OPC	PP	EMI
1. Ult. Freeway Section Redesign	3501	3276						
2. Life Cycle Cost Analysis	84							
3. Citrus/Slover Intersection	392	199		26				
4. Cherry GAD Revisions		260						
5. Field Surveys			735					
6. Drainage Analysis/Redesign				908				
7. Utility Coordination/Design				334				
8. Potholing			334					
9. Legal Desc/Map Revisions			554				1240	
10. Geotechnical								223
11. Landscape PA&ED (Optional)	118	30			372	40		
12. General Project Management	120	56						
<b>TOTAL HOURS</b>	<b>4215</b>	<b>3821</b>	<b>1623</b>	<b>1268</b>	<b>372</b>	<b>40</b>	<b>1240</b>	<b>223</b>

TYLI = T.Y. Lin International  
PTG = Parsons Transportation Group  
AE = Associated Engineers  
BE = Birge Engineering  
LCI = Lynn Capouya, Inc.  
OPC = Overland Pacific Cutler  
PP = Paragon Partners  
EMI = Earth Mechanics, Inc.

Please review the attached materials, and provide comments as needed. Should you have any questions, please do not hesitate to contact me.

Sincerely,

T.Y. Lin International



Gary Antonucci, PE  
Vice President



**Background and Scope  
Change Order Request No. 3**

**1. ULTIMATE FREEWAY SECTION AND HIGHWAY GEOMETRICS REDESIGN  
REQUIRED BY CALTRANS (TYLI and Parsons)**

*Background*

In late 2009, Caltrans geometric design reviews on other related I-10 freeway projects in the vicinity of the interchanges led to a detailed analysis and evaluation of design conformance to accommodate the ultimate mainline freeway section that is anticipated in the future. These geometric issues were outlined, analyzed and reviewed with the PDT and Caltrans staff to thoroughly discuss and resolve the direction forward.

Various constructability issues were also analyzed and considered, also contemplating future improvements and throw-away work, and related roadway and structural cost estimates were prepared. Based on input from the consultant teams and discussions at several meetings with Caltrans Headquarters and District staff, the PDT recommended the redesign of both interchanges for the future, ultimate freeway section, and the design team was directed to incorporate this change without jeopardizing key project milestones for completion.

To accommodate this change, the location of the edge of pavement must be shifted 12 feet (from 85 feet to 97 feet measured from the centerline). For the roadway/civil plans, this results in changes to ramp alignments and locations, drainage and electrical systems, traffic items (pavement delineation, signing, and traffic handling plans), and the I-10 Channel.

For the Cherry Avenue interchange project, the Caltrans geometric reviewer also recommended geometric design revisions to the westbound high speed loop on ramp and advised that the redesign incorporate a 'D' configuration intersection for this interchange movement. Since this change affected the approved geometric approval drawings and the current design at approximately 60% level, the team analyzed the impacts of this change with the Caltrans reviewers and held several meetings to discuss in detail. In accordance with Caltrans direction, the design team incorporated this change that was also recommended by Caltrans geometrician staff. This change required various design plan revisions as detailed herein including, but not limited to, layout, profile, electrical, drainage, utility, traffic handling, pavement delineation, staging, structure, and wall plans.

To incorporate the forecasted, ultimate freeway cross section at both interchanges, the overcrossings and retaining walls at both interchange locations are similarly affected. In general, the bridges become longer and/or deeper, abutments are shifted and/or modified, and retaining walls are relocated and changed in height/length.

The tables below summarize the effects of the redesign on the structures at the two interchanges:

Attachment A  
CN 08050-1  
TN 82610000

#### CITRUS INTERCHANGE

Structure	Previous main dimensions	Updated dimensions with Ultimate Freeway Section	Comments
Citrus Overcrossing	239'-2" long, 116' wide, 5'-0" deep, 126'-8" main span	237'-7" long, 116' wide, 5'-5" deep, 133'-7" main span	Change in substructure type at Abutment 1
Retaining Wall 790	1028' long (620' MSE & 408' Type 1) 35' max height	Lengthened by approximately 100' (37.5' max height)	Wall heights will change at each location due to ramp profile and superelevation modifications
Retaining Wall 802	1140' long (544' MSE & 650' Type 1) 35' max height	Shortened by approximately 120' (35' max height)	Wall heights will change at each location due to ramp profile and superelevation modifications
Retaining Wall 792	1413'-6" long 20' max height	Shortened by approximately 200' (22' max height)	Wall heights will change at each location due to alignment shift and ramp profile and superelevation modifications
Retaining Wall 795	678' long 16' max height	Lengthened by approximately 20' (16' max height)	Wall heights will change at each location due to ramp realignment

#### CHERRY INTERCHANGE

Structure	Previous main dimensions	Updated dimensions with Ultimate Freeway Section	Comments
Cherry Overcrossing	216'-6" long, 126'-6" wide, 5'-0" deep, 124'-4" main span	236'-6" long, 126'-6" wide, 5'-3" deep, 132'-7" main span	Longer main span
Retaining Wall 680	1272' long (575' MSE & 697' Type 1) 35' max height	Shortened by approximately 52' (37.5' max height)	Wall heights will change at each location due to ramp profile and superelevation modifications
Retaining Wall 696	1374' long (525' MSE & 849' Type 1) 35' max height	Shortened by approximately 49' (35' max height)	No wall height change
Retaining Wall 690	950' long, 26' max height	Lengthened by approximately 421' (34' max height)	Wall heights will change at each location due to alignment shift and ramp profile and superelevation modifications
Retaining Wall 688	563' long, 28' max height	Shortened by approximately 12' (18' max height)	Wall heights will change at each location due to alignment shift and ramp realignment
Retaining Wall 33	592' long, 18' max height	Lengthened by approximately 30' (18' max height)	No wall height change

At the time official direction was received to redesign the interchanges, the 60% roadway plans for both interchanges were essentially complete, 65% structure plans for Citrus were complete, and 65% structure plans for Cherry were essentially complete. As a result, revisions necessary for the ultimate freeway section redesign thus result in substantial rework of these plans.

A detailed scope of work for this additional effort is the following:

*Scope of Work*

*Citrus Avenue Interchange – Civil (TYLI and Parsons)*

1. Title and Location Map (Revise 1 of 1 sheet):
  - a. Adjust sheet to reflect new limits of the project to accommodate ultimate freeway section.
2. Typical Cross Sections (Revise 15 of 20 sheets):
  - a. Revise/add cross sections for EB-on ramp, to change from 3 to 2 lanes; and remove HOV bypass lane to minimize impacts of ultimate freeway section design
  - b. Redesign and re-station ramp typical cross section limits; including gore area station limits, lane drop taper limits and barrier/curb locations
  - c. Revise horizontal wall locations
  - d. Adjust dimensioning such as Right of Way (ROW) callouts
3. Key Map and Line Index (Revise 1 of 1 sheet):
  - a. Revise to reflect changes on layout sheets
4. Layout (Revise 4 of 6 sheets):
  - a. Redesign EB on, WB on, WB loop on , and WB off ramps (total of 4 ramps)
  - b. Reannotate all horizontal callouts: including concrete barriers, tapers, pavement types, horizontal geometry (PT, PC, PI, curve data etc.), wall locations
  - c. Redesign intersections at EB on/Citrus, WB on/Citrus, WB loop on/Citrus and WB off/Citrus including curb returns, curb ramps, sidewalks, and barrier rails where necessary; reannotate callouts for ETW, EP, station, and elevations.
  - d. Recalculate and verify horizontal sight clearance requirements for all curves.
5. Profiles and Superelevations (Revise 9 of 11 sheets):
  - a. Redesign EB on, EB off, WB on, WB loop on , and WB off ramp profiles
  - b. Recheck vertical curve sight distance calculations
  - c. Recheck vertical clearance calculations for the I-10 bridge over the WB loop on and for channel clearances under the WB on, WB loop on and WB off ramps
  - d. Redesign superelevation diagrams
  - e. Reannotate all the profile and superelevation diagram callouts
6. Construction Details (Revise 44 of 67 sheets):
  - a. Revise gore area details – sawcut limits and revise all elevation callouts
  - b. Revise guard rail details
  - c. Revise removal plans
  - d. Revise fencing plans
7. Contour grading and DTM model (Revise 4 of 6 sheets):
  - a. Re-perform 3D modeling

- b. Recreate design templates
  - c. Revise contour grading model
  - d. Revise grading plans
8. Stage Construction (Revise 6 of 6 sheets):
- a. Reanalyze stage construction on the mainline
  - b. Redesign stage construction at ramp intersections
9. Traffic Handling & Detour Plans (Revise 24 of 100 sheets):
- a. Reanalyze traffic handling on the mainline
  - b. Redesign traffic handling at ramp intersections
  - c. Create any new detour plan sheet resulting from revised stage constructions plans
10. Pavement Delineation (Revise 4 of 8 sheets):
- a. Redesign a total of 5 on and off ramps
  - b. Reannotate all callouts: including striping details, tapers, intersections and ramp metering limit lines, pedestrian crossings and pavement markings
  - c. Redesign intersections, including curb ramps
  - d. Recalculate and verify horizontal clearance requirements
  - e. Recalculate quantities
11. Sign Plans (Revise 8 of 16 sheets):
- a. Revise plan sheets based on new ramp alignments
  - b. Revise plan sheets based on new mainline edge of pavement
  - c. Move signs behind the new intersection curb return locations
12. Summary of Roadway Quantities (Revise 3 of 3 sheets):
- a. Recalculate all quantities
  - b. Revise quantity plan sheets
13. Retaining Wall Plans (Revise 2 of 4 sheets):
- a. Redesign 2 walls that provide room for the MVPs (standard walls)
14. Storm Water Data Report:
- a. Include discussion of jacking new culvert under/across i-10 freeway
  - b. Include new footprint in project discussion
  - c. Reiterate the I-10/Channel interim discussion
15. ROW Requirement map:
- a. Include changes in two (2) parcels: 251-141-27 and 237-051-17.
16. Supplemental Fact Sheets with Design Exceptions: Prepare supplemental design exception fact sheets for any non-standard design features that were not previously documented as listed below:
- a. Mandatory Design Exception Features:
    - 1. Vertical Stopping Sight Distance on CI-4 - EB-Off ramp (Index 201.1)

- b. Advisory Design Exception Features are:
  - 1. Vertical Curve length on CI-4 – EB-Off ramp (Index 204.4)
  - 2. Superelevation runoff on CI-1 – EB-Off ramp (Index 203.6)
- c. Ramp Metering Exception:
  - 1. Prepare a new Ramp Metering exception factsheet for the eastbound on ramp to remove the HOV bypass lane
- 17. Cost estimate
  - a. Revise cost estimate to reflect differences to accommodate ultimate freeway section design.
- 18. I-10 Channel (Revise 3 of 3 sheets) (*Parsons*)
  - a. Realign and reanalyze ultimate channel
  - b. Redesign interim condition (or half of the ultimate channel width)
  - c. Recalculate quantities
- 19. I-10 Channel Structures (Revise 12 of 15 sheets) (*Parsons*)
  - a. Redesign reinforced concrete boxes
  - b. Redesign open channel
  - c. Prepare new structure transition details
  - d. Analyze right-of-way vs. constructability constraints
- 20. Drainage Report (*Parsons*)
  - a. Discuss and describe interim condition (for half of ultimate channel width)
  - b. Add jacking of new culvert under I-10 freeway
- 21. Electrical, Signal, Ramp Metering, and Lighting Plans (Revise 11 of 19 sheets) (*Parsons*)
  - a. Redesign/revise traffic signals based on new intersection curb return locations
  - b. Redesign/revise ramp metering, pull boxes, and cabinets
  - c. Redesign/revise street lighting and pull boxes

*Cherry Avenue Interchange – Civil (Parsons)*

- 1. Typical sections (Revise 12 of 14 sheets)
  - a. Add cross sections for I-10 median barrier
  - b. Revise/add cross sections for “D” configuration of westbound loop entrance and westbound off ramp.
  - c. Redesign and re-station ramp typical cross section limits; including gore area station limits, lane drop taper limits and barrier/curb locations
  - d. Revise horizontal wall locations
  - e. Adjust dimensioning such as Right of Way (ROW) callouts
- 2. Layout sheets (Revise 5 of 10 sheets)

- a. Redesign EB on, WB on, "D" configuration of westbound loop entrance , and WB off ramps (total of 4 ramps)
  - b. Reannotate all horizontal callouts: including concrete barriers, tapers, pavement types, horizontal geometry (PT, PC, PI, curve data etc.), and wall locations; reannotate callouts for ETW, EP, station, elevations.
  - c. Redesign intersections at EB on/Cherry, WB on/Cherry, WB loop on/Cherry and WB off/Cherry including curb returns, curb ramps, sidewalks, and barrier rails where necessary.
  - d. Recalculate and verify horizontal sight clearance requirements for all curves.
  - e. Add I-10 median barrier and pavement callouts - remove existing metal beam guardrail and replace with concrete barrier.
3. Profile and Superelevation sheets (Revise 9 of 13 sheets)
- a. Redesign EB on, EB off, "D" configuration of westbound loop entrance, WB loop on , and WB off ramp profiles
  - b. Recheck vertical curve sight distance calculations
  - c. Recheck vertical clearance calculations for the I-10 bridge over the WB loop on ramp and for channel clearances under the WB on, WB loop on and WB off ramps
  - d. Redesign superelevation diagrams
  - e. Reannotate all profile and superelevation diagram callouts
4. Construction details (Revise 44 of 50 sheets)
- a. Revise gore area and auxiliary lane details - sawcut limits and revise all elevations callouts
  - b. Revise westbound loop entrance intersection detail to "D" shape intersection - revise all curb returns, dimensions and elevation callouts
  - c. Create new detail sheets for median pavement structural sections and concrete barrier replacements, calculate/verify if standard median barrier is adequate or retaining barrier is necessary.
  - d. Revise removal plans
  - e. Revise fencing plans
5. Contour Grading and DTM model (Revise 5 of 10 sheets)
- a. Re-perform 3-D modeling and re-grade 5 on and off ramps and auxiliary lanes
  - b. Revise westbound loop entrance model to "D" shape intersection
  - c. Add model for median barrier.
6. Drainage Plans and Profiles (Revise 44 of 44 sheets)
- a. Reanalyze drainage capacity calculations and relocate drainage inlets
  - b. Analyze and modify drainage inlets in median
  - c. Recalculate quantities
7. Drainage Details (Revise 4 of 19 sheets)
- a. Prepare additional median drainage inlet modification details
8. I-10 Channel (Revise 3 of 3 sheets)

- a. Realign and reanalyze ultimate channel
  - b. Redesign interim condition (for half of the ultimate channel width)
  - c. Recalculate quantities
9. I-10 Channel Structures (Revise 19 of 19 sheets)
- a. Redesign reinforced concrete boxes
  - b. Redesign of open channel
  - c. Prepare new structure transition details
  - d. Analyze ROW versus constructability constraints
10. Drainage Report
- a. Discuss and describe interim condition (for half of the ultimate channel width)
  - b. Adding jacking of new culvert under/ across I-10 freeway
11. Stage Construction (All stages were affected on 9 of 9 sheets)
- a. Reanalyze stage construction and traffic handling on the mainline
  - b. Redesign stage construction at ramp intersections
  - c. Prepare additional stage construction for median pavement and barrier replacement
12. Traffic Handling (Revise 63 of 63 sheets)
- a. Reanalyze traffic handling on the mainline
  - b. Redesign traffic handling at ramp intersections
  - c. Prepare additional traffic handling for median pavement and barrier replacement
13. Detour Plans (Revise 2 of 2 sheets)
- a. Create new plan sheets resulting from revised stage constructions plans
14. Pavement Delineation (Revise 10 of 15 sheets)
- a. Redesign a total of five on and off ramps
  - b. Reannotate all the callouts: including striping details, tapers, intersections and ramp metering limit lines, pedestrian crossings and pavement markings
  - c. Redesign intersections, including curb ramps
  - d. Recalculate and verify horizontal clearance requirements
  - e. Recalculate quantities
15. Sign Plans (Revise 8 of 24 sheets)
- a. Revise plan sheets based on new ramp alignments
  - b. Move signs behind the new intersection curb return locations
16. Summary of Roadway Quantities (Revise 5 of 5 sheets)
- a. Recalculate all quantities
  - b. Revise quantity plan sheets
17. Electrical Signal Ramp Metering and Lighting Plans (Revise 14 of 22 sheets)
- a. Redesign/revise traffic signals based on new intersection curb return locations
  - b. Redesign/revise ramp metering, pull boxes and cabinets
  - c. Redesign/revise street lighting and pull boxes

18. Storm Water Data Report
  - a. Include discussion of jacking new culvert under/ across i-10 freeway
  - b. Include median drainage discussion
  - c. Reiterate the I-10/Channel interim discussion
19. Supplemental Fact Sheets with Design Exceptions: Prepare supplemental design exception fact sheets for any non-standard design features that were not previously documented as listed below:
  - a. Mandatory Design Exception Features:
    1. Vertical Stopping Sight Distance on Cherry Avenue (Index 201.1)
    2. Horizontal Stopping Sight Distance on I-10 - existing condition (Index 201.1)
  - b. Advisory Design Exception Features:
    1. Design Speed on Cherry Avenue (Index 101.1)
    2. Vertical Curve length on Cherry Avenue (Index 204.4)
    3. Superelevation runoff tangent between reverse curves on loop ramp (Index 203.6)
    4. 2:1 embankment slopes
  - c. Ramp Metering Exception:
    1. Prepare a new Ramp Metering exception factsheet for the eastbound on ramp to remove the HOV bypass lane

*Citrus Avenue Interchange - Structural (TYLI)*

**General:** Review partial rework of the preliminary GAD and update due to the ultimate freeway section changes. Provide additional Structural Project Engineering and new QA/QC review for the 65% submittal. Update foundation tables and coordinate with the geotechnical sub.

**Overcrossing:** Modify Abutment 1 from a short seat to a high seat cantilever. While the bridge ends up being slightly shorter, one span is forced to be longer (while the other gets shorter), resulting in a 5 inches deeper superstructure. Revise analysis and calculations accordingly and revise 29 sheets (excluding Log of Test Borings).

**Overhead:** Minor design and detailing effort due to the ultimate freeway section changes to verify transition details associated with the adjacent walls and with the shifted lanes along the east-bound ramps.

**Retaining Wall 790:** Ultimate freeway section changes result in profile change and a 100 foot longer wall. Revise 16 previously completed sheets accordingly.

**Retaining Wall 802:** Ultimate freeway section changes result in profile change and a 120 foot shorter length wall. Revise 17 completed sheets accordingly.

**Retaining Wall 792:** Ultimate freeway section changes cause this wall to move further to the south and change the east-bound ramp profiles. These changes result in a wall that shifts 12 feet to 19 feet south, is around 4 to 6 feet higher and is 200 feet shorter. Revise 12 previously completed sheets accordingly.



**Retaining Wall 795:** Ultimate freeway section changes shift this wall, resulting in different wall geometry, wall heights and lengths. Revise 7 previously completed sheets accordingly.

*Cherry Avenue Interchange – Structural (TYLI)*

**General:** Review partial rework of the preliminary GAD and update due to the ultimate freeway section changes. Provide additional Structural Project Engineering work, including structural analysis and calculations. Update foundation tables and coordinate with the geotechnical sub.

**Overcrossing:** Due to the ultimate freeway section changes, the structure needs to be 20 feet longer and 3 inches deeper to accommodate the additional future freeway width. Revise analysis and calculations accordingly and revise 3 previously completed sheets.

**Overhead:** Minor design and detailing effort due to the ultimate freeway section changes to verify transition details associated with the adjacent walls and with the shifted lanes along the east-bound ramps.

**Retaining Wall 680:** An MSE and Type 1 wall separating the east-bound off-ramp and the UPRR tracks. The ultimate freeway section results in a profile change and a 52 foot shorter wall. There are 18 partially completed sheets that need to be modified.

**Retaining Wall 696:** Ultimate freeway section changes result in a wall profile change and a 49 foot shorter wall. Revise 20 partially completed sheets accordingly.

**Retaining Wall 690:** Ultimate freeway section changes shift this wall 10 to 17 feet further to the south and change the east-bound ramp profiles. Revise 2 partially completed sheets accordingly.

**Retaining Wall 33:** Ultimate freeway section changes, by shifting the drainage channel and ramps will result in different wall heights and lengths for this wall. Revise one partially completed accordingly.

**Retaining Wall 688:** Ultimate freeway section changes result in a shift of the west-bound direct on-ramp so this wall will shift up to 40 feet, resulting in new heights and a different length. Revise one partially completed sheet accordingly.

## **2. LIFE CYCLE COST ANALYSIS (LCCA) (TYLI)**

### *Background*

Current Caltrans practice calls for preparation of LCCA report during the PA&ED phase. As a result, the original scope of work for this contract assumed that the LCCA reports for each interchange would already be complete. However, it was determined that LCCA reports had not been prepared, and Caltrans is requiring them as part of the PS&E phase.

### *Scope of Work*

Attachment A  
CN 08050-1  
TN 82610000

- Prepare new LCCA reports for each interchange in accordance with Caltrans *LCCA Procedures Manual*, dated November 2007. Submit reports in draft form to SANBAG and Caltrans, and make revisions (two cycles) until approval is obtained.

### 3. CITRUS/SLOVER INTERSECTION (TYLI, Parsons, and Birge)

#### *Background*

During preparation of PA&ED for Citrus Avenue, a decision was made to stop the southerly limits of the interchange project approximately 350 feet north of the Citrus/Slover intersection. It was assumed that a separate project, led by the City of Fontana, would be conducted simultaneously with the interchange to complete the necessary horizontal and vertical connections to make the project complete and constructable. However, the City project was never funded or completed.

As a result, it is necessary to prepare design plans and conduct other activities to complete this critical piece of the Citrus Avenue project to make the interchange project constructable. This covers a length of approximately 350 feet, and requires additional design of curb and gutter, new profiles, drainage facilities, traffic signal modifications, local property access, and preparation of right-of-way documents. Development of concepts, and in-depth coordination with City of Fontana in terms of interim and ultimate geometry, is also necessary.

Since the interchange project is not constructable without this change, SANBAG concurred with the Project Development Team that this out-of-scope work would be included in the PS&E package for the interchange.

#### *Scope of Work*

- Conduct meetings with City staff and prepare concept plans for intersection alternatives and geometry. Revise as required based on City input. Evaluate local access modifications and TCE requirements.
- Prepare or revise the following 19 sheets:
  - Title and Location Map (1 sheet)
  - Typical Cross Sections (1 sheet)
  - Key Map and Line Index (1 sheet)
  - Layout (1 sheet)
  - Profiles and Superelevations (1 sheet)
  - Additional Construction Details (5 sheets)
  - Contour grading and DTM model (1 sheet)
  - Stage Construction (1 sheet)
  - Traffic Handling Plans (1 sheet)
  - Traffic Signal (1 sheet)
  - Pavement Delineation (2 sheets)
  - Sign Plans (2 sheets)

- Additional Retaining Wall Plans (2 sheets)
- Conduct analysis and prepare plans for traffic signal modifications
- Prepare additional quantity and cost estimates for new improvements
- Update ROW Requirement Map to reflect changes/additions in four (4) parcels: 0251-054-48, 0237-054-17, 0237-054-18, and 0237-054-19.
- Revise legal descriptions and plats for above-noted parcels. Prepare additional legal descriptions and plats for three (3) new TCE's.
- Revise SWDR to reflect new project footprint.

#### 4. CHERRY GAD REVISIONS (Parsons)

##### *Background*

At the February 26, 2009 PDT Meeting, both SANBAG and Caltrans agreed that the previously approved Geometric Approval Drawings (GAD) contained ramp profile design elements that would cause constructability issues. The consultant team was directed to revise the on- and offramp profile design to eliminate these issues. The necessary changes included reevaluation of the ramp horizontal alignment, vertical profiles, and superelevation diagrams, and preparation of fact sheets.

##### *Scope of Work*

- Prepare supplemental fact sheets for non-standard features as follows:
  - Mandatory Design Exceptions:
    - Vertical Stopping Sight Distance on Cherry Avenue (Index 201.1)
    - Horizontal Stopping Sight Distance on I-10 – existing condition (Index 201.1)
  - Advisory Design Exceptions:
    - Design Speed on Cherry Avenue (Index 101.1)
    - Vertical Curve Length on Cherry Avenue (Index 204.4)
    - Superelevation Runoff Tangent Between Reverse Curves on loop ramp (Index 203.6)
    - 2:1 Fill Slopes within Caltrans right-of-way (Index 304.1)
- Reanalyze and revise on- and offramp horizontal alignments, for each ramp
- Reanalyze and revise on- and offramp vertical profiles
- Revise superelevation diagrams

#### 5. FIELD SURVEYS (Associated)

##### *Background*

Various additional items of field survey work during design development which were outside the existing scope of work have been required during the course of the project:

**Cherry Soundwall:** Relocated from original planned alignment

**Channel Tie-ins:** Required for expanded channel design limits

**Collect Utility Features:** Greater than anticipated number of utilities

**Verify Aerial Mapping:** Confirm work provided by others

**Collect Building Corners, Flag R/W:** Requested by City and County appraisers and property owners

**Median Drainage Ties:** Required for change in drainage concept (jacked pipes)

**Citrus/Slover Intersection:** Expanded project limits

**Median Pavement (Cherry):** Required for design change to include concrete median barrier

**Miscellaneous Future Requests:** To provide for unanticipated future needs

#### *Scope of Work*

- **Drainage ties at Cherry, Citrus, Valley and Slover**
  - Coordinate with Caltrans Permits for access to freeway
  - Expand survey control for local ties made
  - Collect ties and flowline dips for approximately 52 inlets and structures
  - Office support for computations and mapping, discernment of as-built drainage plans
- **Locate and provide detail for Cherry Soundwall; original location of soundwall was shifted to ROW line which required additional survey information including:**
  - Research record maps and deeds for R/W and local cadastral monuments
  - Coordinate with Caltrans Permits for access to freeway
  - Expand survey control for local ties made
  - Search for and recover existing monuments
  - Collect existing topo within limits of relocated soundwall
  - Perform property boundary survey analysis to establish existing R/W
  - Office support for computations and topographic mapping
- **Channel tie-ins east and west of each interchange**
  - Coordinate with Caltrans Permits for access to freeway
  - Expand survey control for local ties made
  - Collect existing channel ties and flowline
  - Office support for computations and mapping
- **Tie and dip utility features at each interchange**
  - Expand survey control for local ties made

- Collect existing utility feature ties
  - Office support for computations and mapping
- Verify aerial mapping (by others) at each interchange
  - Coordinate with field crew for visual inspection and provide response
- Collect building corners and flag proposed R/W at various locations for each interchange
  - Collect building corners as needed
  - Obtain proposed R/W and prepare computations for field staking
  - Field survey to provide staking
  - Office support for computations and mapping
- Drainage ties within median for both interchanges
  - Coordinate with Caltrans Permits for access to freeway and lane closures
  - Secure traffic control specialty contractor (and approval from Caltrans)
  - Perform field surveys
  - Office support for computations and mapping
- Tie-in survey for Citrus/Slover intersection
  - Collect ties for existing improvements
  - Office support for computations and mapping
- Median pavement survey for Cherry interchange
  - Coordinate with Caltrans Permits for access to freeway
  - Collect ties to existing freeway pavement, inside and outside ETW's, (approximately 2000 LF each direction)
  - Collect survey information for newly proposed bore/jack pipes under freeway and additional Cherry Ave IC pavement joins
  - Office support for computations and mapping
- Miscellaneous survey requests (*Optional Task - budget for future needs*)
  - Coordinate with Caltrans Permits for access to freeway
  - Perform field surveys as requested
  - Office support for computations and mapping

## **6. DRAINAGE ANALYSIS AND REDESIGN AT CITRUS IC (Birge)**

### *Background*

For handling of local drainage along the southerly side of the freeway, the PA&ED documents for both interchanges assumed perpetuation of an existing ditch between I-10 and the UPRR right of way. However, due to retaining wall design requirements which emerged during PS&E development, this assumption was no longer valid (i.e. the ditch conflicted with structural elements). As a result, it has become necessary to evaluate alternative methods for handling local drainage requirements and supplemental hydrologic

and hydraulic analysis is required to establish an appropriate configuration for discharging storm waters tributary to the southern portions of the subject interchanges.

To date, various alternatives have been considered, including:

- Connection to the I-10 Channel via pipe jacking under the I-10 mainline
- Utilization of infiltration "dry wells"
- Utilization of pipe and "burp-out" facilities
- Connection to existing City of Fontana drainage facilities located in Citrus and Cherry Avenues

After preliminary analyses and discussions with the design team and Caltrans technical staff it was determined that jacking under the freeway was likely the most practical and cost-effective solution. Detention and/or infiltration devices may also be required to accommodate water quality requirements and capacity constraints within the existing systems. These devices and storm drain lines would be designed to be placed within the freeway right of way.

Furthermore, due to modifications to accommodate the ultimate freeway section, the design of drainage facilities that had already been completed will require substantial revision. Specifically, drainage plan and profile and detail sheets previously prepared in anticipation of the 60% submittal require substantial revision to meet the new design criteria.

#### *Scope of Work*

- Attend meetings to discuss and determine most appropriate and cost-effective drainage solution for each interchange. Consider the following alternatives:
  - Connection to the I-10 Channel via pipe jacking under I-10
  - Utilization of infiltration "dry wells"
  - Utilization of pipe and "burp-out" facilities
  - Connection to existing City of Fontana drainage facilities located in Citrus and Cherry
- Conduct meetings with Caltrans and City of Fontana staff to evaluate alternatives
- Prepare hydraulic analysis of proposed jacked-pipe system at Citrus
- Coordinate with Caltrans and the design team regarding jacking parameters
- Prepare hydrology / hydraulic analysis for the Citrus Storm Drain system to determine hydraulic grade line conditions within the proposed system and the I-10 Channel
- Prepare preliminary design including two (2) plan and profile sheets of jacking requirements for the Citrus interchange for Caltrans review
- Prepare supporting design calculations to be appended to the project drainage report.
- Revise PS&E documents to reflect revised geometry and connection to I-10 channel

- Perform additional calculations and design to address extension of drainage design southerly on Citrus to Slover Avenue to accommodate design revisions requested by the City of Fontana. Two (2) additional Drainage Profile sheets are required.
- Revise Drainage Report to reflect revised geometry and connection to I-10 channel. Drainage Report and six (6) Hydrology Maps require revision
- Revise previously completed drainage plans to incorporate redesign for ultimate freeway section. Six (6) Drainage sheets and three (3) Drainage Profile sheets require significant revision

## **7. UTILITY COORDINATION AND DESIGN (Birge)**

### *Background*

Due to the magnitude of Caltrans administrative requirements, and excessive number of utility coordination issues, the team's utility consultant, Birge Engineering, has determined that its budget to perform the various tasks required for development of utility plans and performance of related coordination activities for the project is not adequate to complete the work.

In addition, Birge has had to undertake significant coordination efforts with SCE, including managing the development of a joint easement corridor to be utilized by SCE and Fontana Water Company. This effort is beyond the original scope and budget for research and coordination.

### *Scope of Work*

- Conduct/continue utility research, coordination and meetings at each interchange. Oversee and coordinate negotiations with SCE and Fontana Water regarding joint utility easement and proposed relocations. Prepare additional Notices to Owners, obtain encroachment permits, and coordinate utility effort with Caltrans.
- Additional work to prepare and complete detailed utility plans (U-sheets) for existing and relocated facilities at each interchange.

## **8. POTHOLING (Associated)**

### *Background*

The original scope of work assumed a total of 10 potholes for both interchanges throughout the entire project, and did not specifically contemplate potholing within UPRR right-of-way. As design progressed, it became evident that several utilities that had been installed in the UPRR right-of-way might have the potential to conflict with new bridge or retaining wall footings. Thus it became necessary to initiate a potholing program within UPRR property. This involved 29 potholes alone within UPRR property, along with additional effort to secure permits and engage a railroad flagman.

Similarly, as drainage and other civil design components outside of the UPRR right-of-way progressed, it was determined the potential for numerous utility conflicts exists, and a very extensive pothole program will be required. Approximately 30 potholes are anticipated to be required to adequately confirm all conflict situations.

Thus the estimated requirement for at least 39 *additional* (59 total) potholes substantially exceeds the original estimate of 20 total, along with the additional requirements of unanticipated UPRR permitting and coordination.

#### *Scope of Work*

- Apply for right of entry permit from UPRR, including application fees, RR insurance, liability and flagman fees
- Apply for permits as required from City and County agencies, including application and permit fees
- Secure pothole digging contractor and obtain approval from UPRR
- Obtain updated Railroad Safety Training for field personnel
- Coordinate with flagman for contractor access, Utility Coordinator for notifications
- Coordinate with local agencies for approval of methods, traffic control and surface repair
- Pothole digging
- Survey, compute and deliver results to design team

### **9. LEGAL DESCRIPTIONS AND MAP REVISIONS (Associated and Paragon)**

#### *Background*

At the request of all involved agencies on the project, preparation of Right-of-Way Maps and Legal Descriptions/Plats was expedited to support initiation of appraisal and acquisition activities, since the baseline project schedule for these activities is extremely compressed. The maps and legal descriptions for all parcels were completed prior to the 60% design stage.

Typically, the map and legal activities are not initiated in any great detail until the project has reached the 60% design stage. However, all of the map and legal work was based essentially on GAD-level design information. As design neared the 60% level, a substantial number of revisions were determined to be needed, as more precise information became available. In addition, City and County right-of-way staff requested various revisions to parcels as they began discussions and negotiations with property owners. Moreover, the extension of the project limits at Citrus to include the Slover intersection necessitated preparation of maps and legals for several additional, unscoped parcels.

**Attachment B** contains a detailed list of all revisions that were required for various parcels on both interchanges.

#### *Scope of Work*

Attachment A  
CN 08050-1  
TN 82610000



- Convert and interpret Right-of-Way Requirement files (R/W files are prepared in MicroStation J per Caltrans)
- Prepare computations to develop new R/W
- Revise annotation, Station/Out calls, parcel closures, etc
- Revise legal descriptions and plats
- Revise Appraisal Maps
- Distribute to team and agencies for review and implementation

#### **10. GEOTECHNICAL (EMI)**

##### *Background*

The original scope of work assumed a daytime work window from 9:00 am to 3:00 daily to conduct geotechnical field investigations. However, both Caltrans and the City of Fontana required that much of the work be performed at night. This requirement added more time and cost due to lower production rates at night, premium charges by outside contractors for night work, and rental charges for lighting and crash trucks. Fontana also required preparation and submittal of traffic control plans which were not included in the original scope of work.

The foundation reports for Citrus were complete prior to the decision to accommodate the ultimate freeway section, and were well under way for Cherry. The changes due to redesign must be incorporated into the analysis, recommendations, exhibits, and text of the reports.

In addition, the change in the drainage system to jacked proposed pipes under the freeway necessitated additional borings, since no information was available within several hundred feet of the pipe locations.

##### *Scope of Work*

- Conduct night drilling operations in locations required by Caltrans and/or City of Fontana. Provide necessary safety equipment. Prepare and submit traffic control plans as required by City of Fontana.
- Revise foundation reports and exhibits to incorporate structural changes for Cherry and Citrus Overcrossings and retaining walls.
- Drill four borings (two at each interchange) at proposed location of jacked storm drain pipes. Conduct laboratory testing, prepare recommendations, and incorporate into Geotechnical Design Reports for each interchange.

#### **11. LANDSCAPE ARCHITECTURE PA/ED (Optional Task) (TyLin, PTG, Lynn Capouya)**

##### *Background*

An additional task to complete the PA/ED documents for the follow on landscape architecture project is also required for both interchanges. The original scope of work assumed that final planting and irrigation improvement plans would be part of the design package, but only anticipated that the underground irrigation, electrical conduits, gore treatments, and irrigation crossover piping would be installed by the highway contractor.

Consultant shall provide a separate, completed PA/ED document to be approved by Caltrans and include the supplement project approval documents including, but not limited to, supplemental project report, environmental document (CE/CE anticipated), right of way data sheet, and preliminary storm water data report to support the future construction contract (separate from highway contract).

The current design contract already includes completing the final PS&E package for the landscape, irrigation and planting construction bid package. Consultant shall tailor this stand-alone PS&E package, separate from the backbone infrastructure PS&E package required for the highway contract, to be utilized for the future landscape construction contract. This follow on landscape project is anticipated to also include the plant establishment period.

**Note:**

Landscape follow-up projects are anticipated to have their own EA; for Cherry it will be 46801 and for Citrus it will be 46811.

**12. GENERAL PROJECT MANAGEMENT AND QUALITY CONTROL (TYLI and Parsons)**

*Background*

Expansion of the scope of work will require increased effort for team/subconsultant management, coordination with agencies, and other administrative activities. Consultant shall also provide additional quality control checks for all project deliverables and quality assurance verification of the team's quality control process.

*Scope of Work*

- Provide coordination with SANBAG, Caltrans, City, and County staff.
- Attend and/or conduct additional project coordination meetings with all agencies
- Oversee design team in preparation of revised plans and/or additional work
- Quality control / Quality assurance

**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
TYLin		CO-1 Tech 1400m Freeway Section		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Citrus/Cherry at I-10					
<b>DIRECT LABOR</b>					
<b>PERSONNEL</b>	<b>FUNCTION</b>	<b>HOURS</b>	<b>RATE</b>	<b>AMOUNT</b>	
Gary Antonucci	Project Manager	0.0	\$ 87.50	\$ -	
Staff	QA/QC	0.0	\$ 100.00	\$ -	
Jim Rucker	Supervising Bridge Engineer	34.0	\$ 69.85	\$ 2,374.90	
Rodrigo Gonzalez	Supervising Transportation Engineer	21.0	\$ 70.90	\$ 1,488.90	
Jeff Kim	Senior Transportation Engineer	86.0	\$ 57.05	\$ 4,906.30	
Staff	Senior Bridge Engineer	352.0	\$ 55.20	\$ 19,430.40	
Staff	Bridge Engineer	160.0	\$ 44.90	\$ 7,184.00	
Staff	Assistant Bridge Engineer	908.0	\$ 30.69	\$ 27,866.52	
Staff	Transportation Engineer	297.0	\$ 44.00	\$ 13,068.00	
Staff	Assistant Transportation Engineer	403.0	\$ 43.45	\$ 17,510.35	
Staff	CADD Technician (Civil)	280.0	\$ 21.00	\$ 5,880.00	
Staff	CADD Technician (Bridge)	960.0	\$ 32.70	\$ 31,392.00	
Staff	Clerical	0.0	\$ 15.00	\$ -	
<b>TOTAL HOURS</b>		<b>3,501.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 131,101</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		150.00% (of Total Direct Labor + Escalation)		\$ 196,652	
<b>PAYROLL ADDITIVES</b>		0.00% (of Total Direct Labor + Escalation)		\$ -	
				<b>TOTAL MULTIPLIERS</b>	<b>\$ 196,652</b>
<b>OTHER DIRECT EXPENSES</b>					
<b>ITEM</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT COST</b>	<b>AMOUNT</b>	
Reproduction	LS	1	\$ 10,000.00	\$ 10,000.00	
Copying	LS	1		\$ -	
Transportation/Travel	LS	1		\$ -	
Special Deliveries	LS	1		\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
				<b>TOTAL OTHER DIRECT EXPENSES</b>	<b>\$ 10,000</b>
<b>OUTSIDE SERVICES</b>					
<b>COMPANY</b>	<b>FUNCTION</b>			<b>TOTAL</b>	
Associated Engineers	Surveying				
Birge	Utilities and Drainage				
Earth Mechanics Inc	Geotechnical				
Lynn Capouya, Inc	Landscape				
Parsons Transportation Group	Highway/Railroad/Water Quality				
Paragon Partners, Ltd	Right of Way				
				\$ -	
				<b>TOTAL OUTSIDE SERVICES</b>	<b>\$ -</b>
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEI</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 32,775	
				<b>TOTAL FEES</b>	<b>\$ 32,775</b>
				<b>TOTAL COST</b>	<b>\$ 370,529</b>

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**Cost Proposal Worksheet**

COMPANY:	Parsons	DATE:	05/03/2010
PROJECT:	I-10/Cherry and Citrus Interchanges Project - PS&E Phase		05/03/2010
C03 TASK 1 ULTIMATE FREEWAY SECTION			
<b>DIRECT LABOR</b>			
PERSONNEL	FUNCTION	HOURS	AMOUNT
Cheah	Project Management	50	\$ 4,150.00
Cooper	Sr Transportation Engineer	94	\$ 4,311.78
Lees	Sr Transportation Engineer	26	\$ 1,359.80
Pazdan	Sr Transportation Engineer	52	\$ 2,666.04
Kwan	Transportation Engineer	140	\$ 5,398.40
Tan	Transportation Engineer	120	\$ 4,059.60
Wong	Transportation Engineer	170	\$ 5,462.10
Saikali, W	Transportation Engineer	88	\$ 2,453.44
Saikali, Y	Sr Designer	196	\$ 8,145.76
Bottcher	Sr Drainage Engineer	94	\$ 6,532.06
Galvan	Sr Drainage Engineer	120	\$ 6,074.40
Fawaz	Sr Drainage Engineer	86	\$ 4,837.50
Chua	Drainage Engineer	156	\$ 5,985.72
Medina	Drainage Engineer	226	\$ 7,415.06
Perez	Sr Traffic/Signal Engineer	50	\$ 3,089.00
Abraham	Sr Traffic/Signal Engineer	120	\$ 5,257.20
Weibel	Traffic/Signal Engineer	220	\$ 8,470.00
Powell	Transportation Engineer	80	\$ 2,760.00
McNeil	Sr Transportation Engineer	100	\$ 4,821.00
Boddapati	A. Transportation Engineer	234	\$ 6,769.62
Pettersen	Sr Transportation Engineer	240	\$ 9,513.60
Dulor	Sr Bridge Engineer	114	\$ 6,988.20
Sandirasegaram	Sr Bridge Engineer	280	\$ 16,102.80
Johnson	SR CADD Designer	220	\$ 10,447.80
Rudd	Clerical	0	\$ -
<b>TOTAL HOURS</b>		<b>3,276.0</b>	<b>TOTAL DIRECT LABOR \$ 143,071</b>
<b>MULTIPLIERS</b>			
ESCALATION	(of Total Direct Labor)	\$ -	
OVERHEAD	150.00% (of Total Direct Labor + Escalation)	\$ 214,606	
PAYROLL ADDITIVES	(of Total Direct Labor + Escalation)	\$ -	
<b>TOTAL MULTIPLIERS</b>		<b>\$ 214,606</b>	
<b>OTHER DIRECT EXPENSES</b>			
ITEM	UNIT	QUANTITY	AMOUNT
Reproduction	LS	1	\$ -
Copying	LS	1	\$ -
Transportation/Travel	LS	1	\$ 1,000.00
Special Deliveries	LS	1	\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>		<b>\$ 1,000</b>	
<b>OUTSIDE SERVICES</b>			
COMPANY	FUNCTION	TOTAL	
		\$ -	
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ -</b>	
<b>FEES</b>			
OUTSIDE SERVICE	0.00% (of Total Outside Services)	\$ -	
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 35,768	
<b>TOTAL FEES</b>		<b>\$ 35,768</b>	
<b>TOTAL COST</b>		<b>\$ 394,450</b>	



[illegible]

**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
TYLin		G23 Task 2 - Life Cycle Cost Analysis		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Citrus/Citrus at I-10		Summary			
<b>DIRECT LABOR</b>					
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT	
Gary Antonucci	Project Manager	0.0	\$ 87.50	\$ -	
Staff	QA/QC	0.0	\$ 100.00	\$ -	
Jim Rucker	Supervising Bridge Engineer	0.0	\$ 69.85	\$ -	
Rodrigo Gonzalez	Supervising Transportation Engineer	4.0	\$ 70.90	\$ 283.60	
Jeff Kim	Senior Transportation Engineer	20.0	\$ 57.05	\$ 1,141.00	
Staff	Senior Bridge Engineer	0.0	\$ 55.20	\$ -	
Staff	Bridge Engineer	0.0	\$ 44.90	\$ -	
Staff	Assistant Bridge Engineer	0.0	\$ 30.89	\$ -	
Staff	Transportation Engineer	40.0	\$ 44.00	\$ 1,760.00	
Staff	Assistant Transportation Engineer	20.0	\$ 43.45	\$ 869.00	
Staff	CADD Technician (Civil)	0.0	\$ 21.00	\$ -	
Staff	CADD Technician (Bridge)	0.0	\$ 32.70	\$ -	
Staff	Clerical	0.0	\$ 15.00	\$ -	
<b>TOTAL HOURS</b>		<b>84.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 4,054</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		150.00% (of Total Direct Labor + Escalation)		\$ 6,080	
<b>PAYROLL ADDITIVES</b>		0.00% (of Total Direct Labor + Escalation)		\$ -	
				<b>TOTAL MULTIPLIERS</b>	<b>\$ 6,080</b>
<b>OTHER DIRECT EXPENSES</b>					
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT	
Reproduction	LS	1	\$ -	\$ -	
Copying	LS	1	\$ -	\$ -	
Transportation/Travel	LS	1	\$ -	\$ -	
Special Deliveries	LS	1	\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
				<b>TOTAL OTHER DIRECT EXPENSES</b>	<b>\$ -</b>
<b>OUTSIDE SERVICES</b>					
COMPANY	FUNCTION		TOTAL		
Associated Engineers	Surveying				
Birge	Utilities and Drainage				
Earth Mechanics Inc	Geotechnical				
Lynn Capouya, Inc	Landscape				
Parsons Transportation Group	Highway/Railroad/Water Quality				
Paragon Partners, Ltd	Right of Way				
			\$ -		
				<b>TOTAL OUTSIDE SERVICES</b>	<b>\$ -</b>
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEE</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 1,013	
				<b>TOTAL FEES</b>	<b>\$ 1,013</b>
				<b>TOTAL COST</b>	<b>\$ 11,147</b>

Manhour Worksheet									
COMPANY:			SCOPE OF WORK:				DATE:		
TYLin			02 Task 2 - Life Cycle Cost Analysis				05/03/2010		
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:						
Citrus/Citrus at I-10			Summary						
Task No.	Sub-Task No.	Task Activity	Project Manager	Engineer	Design Engineer	Design Engineer	Design Engineer	Design Engineer	Total Hours
2		Life Cycle Cost Analysis (TYLIN)							
16		Prepare LCCA (Citrus and Cherry)		4.0	20.0		40.0	20.0	84.0
TOTALS			-	4.0	20.0	-	40.0	20.0	84.0



**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
TYLin		C03 - Task 3 - Citrus/River Intersection		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Cherry and Citrus at I-10		Summary			
<b>DIRECT LABOR</b>					
<b>PERSONNEL</b>	<b>FUNCTION</b>	<b>HOURS</b>	<b>RATE</b>	<b>AMOUNT</b>	
Gary Antonucci	Project Manager	0.0	\$ 87.50	\$ -	
Staff	QA/QC	0.0	\$ 100.00	\$ -	
Jim Rucker	Supervising Bridge Engineer	0.0	\$ 69.85	\$ -	
Rodrigo Gonzalez	Supervising Transportation Engineer	0.0	\$ 70.90	\$ -	
Jeff Kim	Senior Transportation Engineer	0.0	\$ 57.05	\$ -	
Staff	Senior Bridge Engineer	0.0	\$ 55.20	\$ -	
Staff	Bridge Engineer	0.0	\$ 44.90	\$ -	
Staff	Assistant Bridge Engineer	0.0	\$ 30.69	\$ -	
Staff	Transportation Engineer	64.0	\$ 44.00	\$ 2,816.00	
Staff	Assistant Transportation Engineer	174.0	\$ 43.45	\$ 7,560.30	
Staff	CADD Technician (Civil)	154.0	\$ 21.00	\$ 3,234.00	
Staff	CADD Technician (Bridge)	0.0	\$ 32.70	\$ -	
Staff	Clerical	0.0	\$ 15.00	\$ -	
<b>TOTAL HOURS</b>		<b>392.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 13,610</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		150.00% (of Total Direct Labor + Escalation)		\$ 20,415	
<b>PAYROLL ADDITIVES</b>		0.00% (of Total Direct Labor + Escalation)		\$ -	
<b>TOTAL MULTIPLIERS</b>				<b>\$ 20,415</b>	
<b>OTHER DIRECT EXPENSES</b>					
<b>ITEM</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT COST</b>	<b>AMOUNT</b>	
Reproduction	LS	1		\$ -	
Copying	LS	1		\$ -	
Transportation/Travel	LS	1		\$ -	
Special Deliveries	LS	1		\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ -</b>	
<b>OUTSIDE SERVICES</b>					
<b>COMPANY</b>	<b>FUNCTION</b>			<b>TOTAL</b>	
Associated Engineers	Surveying				
Birge	Utilities and Drainage			\$ 5,068.00	
Earth Mechanics Inc	Geotechnical				
Lynn Capouya, Inc	Landscape				
Parsons Transportation Group	Highway/Railroad/Water Quality			\$ 25,000.00	
Paragon Partners, Ltd	Right of Way				
				\$ -	
<b>TOTAL OUTSIDE SERVICES</b>				<b>\$ 30,068</b>	
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEE</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 3,403	
<b>TOTAL FEES</b>				<b>\$ 3,403</b>	
<b>TOTAL COST</b>				<b>\$ 67,496</b>	

Manhour Worksheet									
DATE	05/03/2010								
PROJECT	0073 - Task 3 - Citrus/Over Intersection								
Task No.	Task Activity	Project Manager	Project Engineer	Project Surveyor	Project Technician	Project Assistant	Project Driver	Project Operator	Total Hours
<b>Summary</b>									
<b>CITRUS/OVER INTERSECTION</b>									
1	Update Title and Location Map (1 sheet)			2.0			10.0		12.0
2	Update Typical Cross Sections (1 sheet)			16.0					16.0
3	Update Key Map and Line Index (1 sheet)			2.0			8.0		10.0
4	Update Layout (1 sheet)			24.0					24.0
5	Update Profiles and Superelevations (1 sheet)			16.0					16.0
6	Add Construction Details (5 sheets)			10.0			50.0		80.0
7	Update contour grading and DIM model (1 sheet)			8.0					26.0
8	Update Stage Construction (1 sheet)			4.0			12.0		16.0
9	Update Traffic Handling Plans (1 sheet)			14.0			50.0		84.0
10	Update Pavement Delineation (2 sheets)			8.0			24.0		32.0
11	Update Sign Plans (2 sheets)			24.0					24.0
12	Update Retaining Wall Plans (2 sheets)			12.0					32.0
13	Update ROW Requirement map			16.0					16.0
14	Update SWDR			4.0					4.0
<b>TOTALS</b>				64.0	174.0		154.0		392.0

**Cost Proposal Worksheet**

COMPANY:	Parsons	DATE:	
PROJECT:	CO-3 Task 3- Citrus Slover Intersection		05/07/2010

DIRECT LABOR				
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
Cheah	Project Management	3	\$ 83.00	\$ 249.00
Cooper	Sr Transportation Engineer	6	\$ 45.87	\$ 275.22
Lees	Sr Transportation Engineer	0	\$ 52.30	\$ -
Pazdan	Sr Transportation Engineer	0	\$ 51.27	\$ -
Kwan	Transportation Engineer	0	\$ 38.56	\$ -
Tan	Transportation Engineer	0	\$ 33.83	\$ -
Wong	Transportation Engineer	0	\$ 32.13	\$ -
Saikali, W	Transportation Engineer	0	\$ 27.88	\$ -
Saikali, Y	Sr Designer	0	\$ 41.56	\$ -
Bottcher	Sr Drainage Engineer	0	\$ 69.49	\$ -
Galvan	Sr Drainage Engineer	4	\$ 50.62	\$ 202.48
Fawaz	Sr Drainage Engineer	8	\$ 56.25	\$ 450.00
Chua	Drainage Engineer	24	\$ 38.37	\$ 920.88
Medina	Drainage Engineer	0	\$ 32.81	\$ -
Perez	Sr Traffic/Signal Engineer	34	\$ 61.78	\$ 2,100.52
Abraham	Sr Traffic/Signal Engineer	60	\$ 43.81	\$ 2,628.60
Weibel	Traffic/Signal Engineer	44	\$ 38.50	\$ 1,694.00
Powell	Transportation Engineer	16	\$ 34.50	\$ 552.00
McNeil	Sr Transportation Engineer	0	\$ 48.21	\$ -
Boddapati	A. Transportation Engineer	0	\$ 28.93	\$ -
Pettersen	Sr Transportation Engineer	0	\$ 39.64	\$ -
Dulor	Sr Bridge Engineer	0	\$ 61.30	\$ -
Sandrasegaram	Sr Bridge Engineer	0	\$ 57.51	\$ -
Johnson	SR CADD Designer	0	\$ 47.49	\$ -
Rudd	Clerical	0	\$ 28.40	\$ -
<b>TOTAL HOURS</b>		<b>199.0</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$ 9,073</b>

MULTIPLIERS		
ESCALATION	(of Total Direct Labor)	\$ -
OVERHEAD	150.00% (of Total Direct Labor + Escalation)	\$ 13,609
PAYROLL ADDITIVES	(of Total Direct Labor + Escalation)	\$ -
<b>TOTAL MULTIPLIERS</b>		<b>\$ 13,609</b>

OTHER DIRECT EXPENSES				
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
Reproduction	LS	1	\$ 50.00	\$ 50.00
Copying	LS	1	\$ -	\$ -
Transportation/Travel	LS	1	\$ -	\$ -
Special Deliveries	LS	1	\$ -	\$ -
				\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 50</b>

OUTSIDE SERVICES		
COMPANY	FUNCTION	TOTAL
		\$ -
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ -</b>

FEES		
OUTSIDE SERVICE	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 2,268
<b>TOTAL FEES</b>		<b>\$ 2,268</b>
<b>TOTAL COST</b>		<b>\$ 25,000</b>

## Manhour Worksheet

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**Cost Proposal Worksheet**

COMPANY: Blrge	SCOPE OF WORK: CD3 Task 3 Citrus Slover Intersection	DATE: 05/03/2010
PROJECT: Cherry/Citrus at I-10	MILESTONE/PHASE/PROJECT SUMMARY:	

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
A	Project Manager	5.0	\$ 86.00	\$ 430
B	Senior Engineer	18.0	\$ 68.00	\$ 1,224
C	Designer I	5.0	\$ 31.50	\$ 158
D		0.0		\$ -
E		0.0		\$ -
F		0.0		\$ -
G		0.0		\$ -
H		0.0		\$ -
I		0.0		\$ -
J		0.0		\$ -
K		0.0		\$ -
				\$ -
				\$ -
				\$ -
				\$ -
TOTAL HOURS		28.0	TOTAL DIRECT LABOR \$ 1,812	

**MULTIPLIERS**

ESCALATION	0.00% (of Total Direct Labor)	\$ -
OVERHEAD-Additional Services	150.00% (of Total Direct Labor + Escalation)	\$ 2,717
TOTAL MULTIPLIERS		\$ 2,717

**OTHER DIRECT EXPENSES**

ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
ODC	Copies	172	\$ 0.50	\$ 86
	Shipping		\$ 20.00	\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
TOTAL OTHER DIRECT EXPENSES				\$ 86

**OUTSIDE SERVICES**

COMPANY	LABOR	MULTIPLIERS	FEE	EXPENSES	TOTAL
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL OUTSIDE SERVICES					\$ -

**FEES**

FIXED FEE- ADDITIONAL SERVICES	10.00% (of Total Outside Services)	\$ 453
TOTAL FEES		\$ 453
TOTAL COST		\$ 5,068





**Cost Proposal Worksheet**

COMPANY:	Parsons	DATE:	
PROJECT:	I-10/Cherry and Citrus Interchanges Project - PS&E Phase	05/03/2010	
C03 - TASK 4 - CHERRY CAD REVISIONS			
<b>DIRECT LABOR</b>			
PERSONNEL	FUNCTION	HOURS	AMOUNT
Cheah	Project Management	25	\$ 83.00 \$ 2,075.00
Cooper	Sr Transportation Engineer	36	\$ 45.87 \$ 1,651.32
Lees	Sr Transportation Engineer	13	\$ 52.30 \$ 679.90
Pazdan	Sr Transportation Engineer	0	\$ 51.27 \$ -
Kwan	Transportation Engineer	112	\$ 38.56 \$ 4,318.72
Tan	Transportation Engineer	74	\$ 33.83 \$ 2,503.42
Wong	Transportation Engineer	0	\$ 32.13 \$ -
Saikali, W	Transportation Engineer	0	\$ 27.88 \$ -
Saikali, Y	Sr Designer	0	\$ 41.56 \$ -
Bottcher	Sr Drainage Engineer	0	\$ 69.49 \$ -
Galvan	Sr Drainage Engineer	0	\$ 50.62 \$ -
Fawaz	Sr Drainage Engineer	0	\$ 56.25 \$ -
Chua	Drainage Engineer	0	\$ 38.37 \$ -
Medina	Drainage Engineer	0	\$ 32.81 \$ -
Perez	Sr Traffic/Signal Engineer	0	\$ 61.78 \$ -
Abraham	Sr Traffic/Signal Engineer	0	\$ 43.81 \$ -
Weibel	Traffic/Signal Engineer	0	\$ 38.50 \$ -
Powell	Transportation Engineer	0	\$ 34.50 \$ -
McNeil	Sr Transportation Engineer	0	\$ 48.21 \$ -
Boddapati	A. Transportation Engineer	0	\$ 28.93 \$ -
Pettersen	Sr Transportation Engineer	0	\$ 39.64 \$ -
Dulor	Sr Bridge Engineer	0	\$ 61.30 \$ -
Sandrasegaram	Sr Bridge Engineer	0	\$ 57.51 \$ -
Johnson	SR CADD Designer	0	\$ 47.49 \$ -
Rudd	Clerical	0	\$ 28.40 \$ -
<b>TOTAL HOURS</b>		<b>260.0</b>	<b>TOTAL DIRECT LABOR \$ 11,228</b>
<b>MULTIPLIERS</b>			
ESCALATION	(of Total Direct Labor)		\$ -
OVERHEAD	150.00% (of Total Direct Labor + Escalation)		\$ 16,843
PAYROLL ADDITIVES	(of Total Direct Labor + Escalation)		\$ -
<b>TOTAL MULTIPLIERS</b>			<b>\$ 16,843</b>
<b>OTHER DIRECT EXPENSES</b>			
ITEM	UNIT	QUANTITY	AMOUNT
Reproduction	LS	1	\$ -
Copying	LS	1	\$ -
Transportation/Travel	LS	1	\$ -
Special Deliveries	LS	1	\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>			<b>\$ -</b>
<b>OUTSIDE SERVICES</b>			
COMPANY	FUNCTION	TOTAL	
		\$ -	
<b>TOTAL OUTSIDE SERVICES</b>			<b>\$ -</b>
<b>FEES</b>			
OUTSIDE SERVICE	0.00% (of Total Outside Services)		\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)		\$ 2,807
<b>TOTAL FEES</b>			<b>\$ 2,807</b>
<b>TOTAL COST</b>			<b>\$ 30,880</b>

[illegible]



**Cost Proposal Worksheet**

COMPANY:		SCOPE OF WORK:		DATE:	
Associated Engineers, Inc.		C-03 - Task 5 - Field Surveys		05/03/2010	
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:			
Cherry/Citrus at I-10		Summary			

DIRECT LABOR					
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT	
Jim Imborski	Project Management	0.0	\$ 90.00	\$ -	
Jim Elliott	Chief Mapper	34.0	\$ 68.88	\$ 2,341.92	
Staff	Licensed Land Surveyor	58.0	\$ 46.38	\$ 2,690.04	
Staff	CADD Technician	36.0	\$ 27.42	\$ 987.12	
Staff	Survey Technician	124.0	\$ 38.17	\$ 4,485.08	
Marc Wilson	Chief of Surveys	19.0	\$ 49.02	\$ 931.38	
Staff	Party Chief	151.0	\$ 47.00	\$ 7,097.00	
Staff	Chainman	278.0	\$ 45.08	\$ 12,532.24	
Staff	Clerical	35.0	\$ 29.67	\$ 1,038.45	
<b>TOTAL HOURS</b>		<b>735.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 32,103</b>

MULTIPLIERS		
ESCALATION	0.00% (of Total Direct Labor)	\$ -
OVERHEAD	92.02% (of Total Direct Labor + Escalation)	\$ 29,541
PAYROLL ADDITIVES	35.46% (of Total Direct Labor + Escalation)	\$ 11,384
<b>TOTAL MULTIPLIERS</b>		<b>\$ 40,925</b>

OTHER DIRECT EXPENSES					
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT	
Misc. Deliveries	LS	8	\$ -	\$ -	
UPRR RoE, Cont. Endors. fee	LS	1	\$ -	\$ -	
UPRR RoE - Protective Liability Ins.	LS	1	\$ -	\$ -	
	LS	0	\$ -	\$ -	
	LS	0	\$ -	\$ -	
		0	\$ -	\$ -	
			\$ -	\$ -	
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ -</b>	

OUTSIDE SERVICES		
COMPANY	FUNCTION	TOTAL
Kantex	pothole digging (29 potholes w/in uprr r/w)	\$ -
UPRR	railroad flagman	\$ -
United Traffic	traffic control for median drainage ties	\$ 3,000.00
		\$ -
		\$ -
		\$ -
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ 3,000</b>

FEES		
OUTSIDE SERVICES ADMIN FEE	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 7,303
<b>TOTAL FEES</b>		<b>\$ 7,303</b>
* average rate		
<b>TOTAL COST</b>		<b>\$ 83,331</b>

<b>CONTINGENCY AMOUNT=</b>	<b>17,588.85</b>
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Manhour Worksheet		COMPANY:		Associated Engineers, Inc.		PROJECT:		Cherry/Citrus at I-10		SCOPE OF WORK:		COP - BASE PLAN SURVEY		MILESTONE/PHASE/PROJECT SUMMARY:		Summary		199.38		166.17		157.9		120.57		81.82		87.01		50.84		112.17		74.175		Total Hours	
Task No.		Task Description		Task Activity		199.38		166.17		157.9		120.57		81.82		87.01		50.84		112.17		74.175		Total Hours													
1		Cherry - various drain ties *				2.0		4.0		4.0		4.0		16.0		2.0		16.0		3.0		3.0		78.0													
2		Citrus - drain ties at Valley *				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
3		Citrus - drain ties N of I-10 *				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
4		Citrus - drain ties at Slover *				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
5		Cherry - Field Surveys and Mapping to establish existing ROW & topo (2-line profile @ 50' int) for prop. Sound Wall. Sta 702 to 744				1.0		6.0		4.0		4.0		12.0		3.0		28.0		4.0		4.0		93.0													
6		Citrus & Cherry - Channel tie-in's E and W of Inter. *				2.0		6.0		6.0		6.0		12.0		2.0		12.0		2.0		2.0		84.0													
7		Cherry - duplicate (see 6)				2.0		6.0		6.0		6.0		12.0		2.0		12.0		2.0		2.0		84.0													
8		Citrus & Cherry - Tie and dip utility features				2.0		6.0		6.0		6.0		12.0		2.0		12.0		2.0		2.0		84.0													
9		Citrus - verify topo @ Sta 87 to 90				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
10		Citrus - verify topo @ Sta 88 to 90				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
11		Citrus - collect dog corners				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
12		Cherry - ROW Flagging - SE corner @ Valley				1.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		18.0													
13																																					
14																																					
15		add ROW Flagging - Cherry				2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		24.0													
16																																					
17		Postholes within UPRR																																			
18		add ROW Flag - Citrus (1200)				1.0		1.0										8.0		14.0				28.0													
19																																					
20																																					
21		Drainage Ties in median				2.0		2.0		2.0		4.0		6.0		2.0		8.0		16.0		6.0		48.0													
22		add 10x10x10 Citrus & Slover (05/10) *				2.0		2.0		2.0		2.0		18.0		1.0		8.0		8.0		8.0		34.0													
23		Cherry - add 10x10x10				2.0		4.0		4.0		4.0		12.0		2.0		14.0		26.0		1.0		67.0													
24																																					
25																																					
26																																					
28																																					
ALL		TOTALS				34.0		58.0		38.0		124.0		19.0		151.0		278.0		35.0		\$3,000.00		735.0													

**Cost Proposal Worksheet**

COMPANY:		SCOPE OF WORK:		DATE:	
Birge Engineering		CC3 - Task 6 - Drainage Analysis/Redesign		05/03/2010	
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:			
Cherry and Citrus at I-10		Summary			
<b>DIRECT LABOR</b>					
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT	
Steven Frieson	Project Management	32.0	\$ 86.00	\$ 2,752.00	
		0.0	\$ -	\$ -	
Henry Pao	Senior Trans Engineer	450.0	\$ 68.00	\$ 30,600.00	
Michael Mulgrew	Trans Engineer	226.0	\$ 40.00	\$ 9,040.00	
Charlene Drake	Assistant Engineer	200.0	\$ 31.50	\$ 6,300.00	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
<b>TOTAL HOURS</b>		<b>908.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 48,692</b>
<b>MULTIPLIERS</b>					
ESCALATION		0.00% (of Total Direct Labor)		\$ -	
OVERHEAD		135.00% (of Total Direct Labor + Escalation)		\$ 65,734	
PAYROLL ADDITIVES		15.00% (of Total Direct Labor + Escalation)		\$ 7,304	
<b>TOTAL MULTIPLIERS</b>				<b>\$ 73,038</b>	
<b>OTHER DIRECT EXPENSES</b>					
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT	
Reproduction	LS	1	\$ 1,000.00	\$ 1,000.00	
Copying	LS	1	\$ 246.00	\$ 246.00	
Transportation/Travel	LS	1		\$ -	
Special Deliveries	LS	1		\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 1,246</b>	
<b>OUTSIDE SERVICES</b>					
COMPANY	FUNCTION		TOTAL		
Company Name	Function		\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
<b>TOTAL OUTSIDE SERVICES</b>				<b>\$ -</b>	
<b>FEES</b>					
OUTSIDE SERVICES ADMIN FEE		0.00% (of Total Outside Services)		\$ -	
FIXED FEE		10.00% (of Total Direct Labor + Total Multipliers)		\$ 12,173	
<b>TOTAL FEES</b>				<b>\$ 12,173</b>	
<b>TOTAL COST</b>				<b>\$ 135,149</b>	



Manhour Worksheet									
COMPANY:		SCOPE OF WORK:				DATE:			
Birge Engineering		003 - Task 6 - Drainage Analysis/Revision				05/03/2010			
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:							
Cherry and Citrus at I-10		Summary							
Task No.	Task Activity	Project Manager	Senior Engineer	Engineer	Assistant Engineer	Assistant Engineer	Assistant Engineer	Assistant Engineer	Total Hours
6	Drainage Analysis/Revision Hydraulic Analysis/Under Freeway System			40.0					40.0
	Flood Routing	2.0		40.0					42.0
	Preliminary Design	2.0		10.0	26.0				38.0
	Design Calculations	6.0		24.0					30.0
	PS&E Revisions	6.0		200.0	200.0	200.0			606.0
	Revise Drainage Report	10.0		110.0					120.0
	Coordination with Caltrans/Design Team	6.0		26.0					32.0
TOTALS		32.0		450.0	226.0	200.0			908.0
ALL									

**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
Birge Engineering		CO-3 Task 7: Utilities		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Cherry and Citrus at I-10		Summary			
<b>DIRECT LABOR</b>					
<b>PERSONNEL</b>	<b>FUNCTION</b>	<b>HOURS</b>	<b>RATE</b>	<b>AMOUNT</b>	
Steven Frieson	Project Management	72.0	\$ 86.00	\$ 6,192.00	
		0.0	\$ -	\$ -	
Henry Pao	Senior Trans Engineer	0.0	\$ 68.00	\$ -	
Michael Mulgrew	Trans Engineer	0.0	\$ 40.00	\$ -	
Charlene Drake	Assistant Engineer	262.0	\$ 31.50	\$ 8,253.00	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
<b>TOTAL HOURS</b>		<b>334.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 14,445</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		135.00% (of Total Direct Labor + Escalation)		\$ 19,501	
<b>PAYROLL ADDITIVES</b>		15.00% (of Total Direct Labor + Escalation)		\$ 2,167	
				<b>TOTAL MULTIPLIERS</b>	<b>\$ 21,668</b>
<b>OTHER DIRECT EXPENSES</b>					
<b>ITEM</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT COST</b>	<b>AMOUNT</b>	
Reproduction	LS	1	\$ 6,376.33	\$ 6,376.33	
Copying	LS	1	\$ -	\$ -	
Transportation/Travel	LS	1	\$ -	\$ -	
Special Deliveries	LS	1	\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
				<b>TOTAL OTHER DIRECT EXPENSES</b>	<b>\$ 6,376</b>
<b>OUTSIDE SERVICES</b>					
<b>COMPANY</b>	<b>FUNCTION</b>	<b>TOTAL</b>			
Company Name	Function	\$ -			
		\$ -			
		\$ -			
		\$ -			
		\$ -			
		\$ -			
				<b>TOTAL OUTSIDE SERVICES</b>	<b>\$ -</b>
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEE</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 3,611	
				<b>TOTAL FEES</b>	<b>\$ 3,611</b>
				<b>TOTAL COST</b>	<b>\$ 46,100</b>

[illegible]

**Cost Proposal Worksheet**

COMPANY:		SCOPE OF WORK:		DATE:	
Associated Engineers, Inc.		OS Task 3 - Potholing		05/03/2010	
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:			
Cherry/Citrus at I-10		Summary			

DIRECT LABOR				
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
Jim Imborski	Project Management	0.0	\$ 90.00	\$ -
Jim Elliott	Chief Mapper	20.0	\$ 68.88	\$ 1,377.60
Staff	Licensed Land Surveyor	40.0	\$ 46.38	\$ 1,855.20
Staff	CADD Technician	23.0	\$ 27.42	\$ 630.66
Staff	Survey Technician	146.0	\$ 36.17	\$ 5,280.82
Marc Wilson	Chief of Surveys	3.0	\$ 49.02	\$ 147.06
Staff	Party Chief	30.0	\$ 47.00	\$ 1,410.00
Staff	Chainman	46.0	\$ 45.08	\$ 2,073.68
Staff	Clerical	26.0	\$ 29.67	\$ 771.42
TOTAL HOURS		334.0	TOTAL DIRECT LABOR \$ 13,546	

MULTIPLIERS		
ESCALATION	0.00% (of Total Direct Labor)	\$ -
OVERHEAD	92.02% (of Total Direct Labor + Escalation)	\$ 12,465
PAYROLL ADDITIVES	35.46% (of Total Direct Labor + Escalation)	\$ 4,804
TOTAL MULTIPLIERS		\$ 17,269

OTHER DIRECT EXPENSES				
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
	LS	8		\$ -
UPRR RoE, Cont. Endors. fee	LS	1	\$ 5,545.00	\$ 5,545.00
UPRR RoE - Protective Liability Ins.	LS	1	\$ 750.00	\$ 750.00
	LS	0	\$ -	\$ -
	LS	0	\$ -	\$ -
		0	\$ -	\$ -
TOTAL OTHER DIRECT EXPENSES				\$ 6,295

OUTSIDE SERVICES		
COMPANY	FUNCTION	TOTAL
Kantex		\$ 16,922.00
UPRR		\$ 7,000.00
Kantex	pothole digging (assume 20 potholes w/in local streets)	\$ 27,500.00
		\$ -
		\$ -
		\$ -
TOTAL OUTSIDE SERVICES		\$ 51,422

FEES		
OUTSIDE SERVICES ADMIN FEE	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 3,082
TOTAL FEES		\$ 3,082
TOTAL COST		\$ 91,614

\* average rate

Manhour Worksheet									
COMPANY		SCOPE OF WORK		DATE					
Associated Engineers, Inc.		003 - Task 8 - Potholing		05/03/2010					
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY							
Cherry/Cirrus at I-10		Summary							
Task No.	TASK ACTIVITY	Project Manager	Site Engineer	Contract Survey	Survey Instrument	Survey Stationing	Survey Distance	Survey Time	Total Hours
8	POTHOLING								
	Potholes outside UPRR	8.0	16.0	12.0	68.0	3.0	16.0	32.0	8.0 163.0
	Potholes within UPRR	12.0	24.0	11.0	78.0		14.0	14.0	18.0 171.0
TOTALS		-	20.0	40.0	23.0	146.0	3.0	30.0	26.0 334.0
ALL									334.0



**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
Associated Engineers, Inc.		C03 - Task 9 - Legal Desc/Map Revisions		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Cherry/Citrus at I-10		Summary			
<b>DIRECT LABOR</b>					
<b>PERSONNEL</b>	<b>FUNCTION</b>	<b>HOURS</b>	<b>RATE</b>	<b>AMOUNT</b>	
Jim Imborski	Project Management	0.0	\$ 90.00	\$ -	
Jim Elliott	Chief Mapper	57.0	\$ 68.88	\$ 3,928.16	
Staff	Licensed Land Surveyor	182.0	\$ 46.38 *	\$ 8,441.16	
Staff	CADD Technician	85.0	\$ 27.42 *	\$ 2,330.70	
Staff	Survey Technician	204.0	\$ 36.17 *	\$ 7,378.68	
Marc Wilson	Chief of Surveys	0.0	\$ 49.02 *	\$ -	
Staff	Party Chief	0.0	\$ 47.00	\$ -	
Staff	Chairman	0.0	\$ 45.08 *	\$ -	
Staff	Clerical	26.0	\$ 29.67 *	\$ 771.42	
<b>TOTAL HOURS</b>		<b>554.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 22,848</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		92.02% (of Total Direct Labor + Escalation)		\$ 21,025	
<b>PAYROLL ADDITIVES</b>		35.46% (of Total Direct Labor + Escalation)		\$ 8,102	
<b>TOTAL MULTIPLIERS</b>				<b>\$ 29,127</b>	
<b>OTHER DIRECT EXPENSES</b>					
<b>ITEM</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT COST</b>	<b>AMOUNT</b>	
Misc. Deliveries	LS	2	\$ 100.00	\$ 200.00	
UPRR RoE, Cont. Endors. fee	LS	1	\$ -	\$ -	
UPRR RoE - Protective Liability Ins.	LS	1	\$ -	\$ -	
	LS	0	\$ -	\$ -	
	LS	0	\$ -	\$ -	
		0	\$ -	\$ -	
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 200</b>	
<b>OUTSIDE SERVICES</b>					
<b>COMPANY</b>	<b>FUNCTION</b>			<b>TOTAL</b>	
Kantex	pothole digging (29 potholes w/in uprr r/w)			\$ -	
UPRR	railroad flagman			\$ -	
United Traffic	traffic control for median drainage ties			\$ -	
				\$ -	
				\$ -	
<b>TOTAL OUTSIDE SERVICES</b>				<b>\$ -</b>	
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEE</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 5,197	
<b>TOTAL FEES</b>				<b>\$ 5,197</b>	
* average rate				<b>TOTAL COST</b>	
				<b>\$ 57,372</b>	

Manhour Worksheet										DATE
COMPANY: Associated Engineers, Inc.										05/03/2010
PROJECT: Cherry/Citrus at I-10										
LINE NO.	ACTIVITY	Summary	Plant	Material	Equipment	Subcontract	Other	Overhead	Profit	Total Hours
1	Local Design Revision									
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13	Citrus - RW revisions (10/09)	20.0	66.0	34.0	82.0	8.0	\$100.00	210.0		
14	Cherry - RW revisions (10/09)	18.0	52.0	24.0	68.0	6.0	\$100.00	166.0		
15										
16	Citrus rw req revisions (Boyle St cul-de-sac)	2.0	8.0	5.0	8.0	2.0		25.0		
17										
18	revised RW Req - Cherry (#5 -blunt-end fix Farmer Boys, etc.)	4.0	12.0	4.0	8.0	2.0		28.0		
19										
20	revised RW Req - Cherry (Revision # 7 & 8)	6.0	18.0	8.0	8.0	2.0		40.0		
21										
22										
23	Citrus - rev r/w req (item H & I)	2.0	6.0	2.0	6.0	1.0		17.0		
24	revised RW Req - Cherry (9.10)	1.0	4.0	2.0	2.0	1.0		10.0		
25	Citrus - rev r/w req (item J)	6.0	18.0	8.0	24.0	4.0		58.0		
26										
TOTALS		57.0	182.0	85.0	204.0	26.0	\$200.00	554.0		
ALL										

**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
Paragon		COA - Task 9 - Legal Based Map Revisions		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Citrus and Cherry at I-10					
<b>DIRECT LABOR</b>					
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT	
staff	Project Manager	140.0	\$ 57.69	\$ 8,076.60	
staff	Senior R/W Engineer	120.0	\$ 57.69	\$ 6,922.80	
staff	Associate R/W Engineer	720.0	\$ 40.86	\$ 29,419.20	
staff	SR R/W Agent	240.0	\$ 45.67	\$ 10,960.80	
staff	CADD Operator	20.0	\$ 35.00	\$ 700.00	
staff	Administrative Support	0.0	\$ 26.44	\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
<b>TOTAL HOURS</b>		<b>1,240.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 56,079</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		90.00% (of Total Direct Labor + Escalation)		\$ 50,471	
<b>PAYROLL ADDITIVES</b>		0.00% (of Total Direct Labor + Escalation)		\$ -	
				<b>TOTAL MULTIPLIERS</b>	
				<b>\$ 50,471</b>	
<b>OTHER DIRECT EXPENSES</b>					
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT	
	LS	1	\$ -	\$ -	
Reproduction, Printing	LS	1	\$ -	\$ -	
	LS	1	\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
				<b>TOTAL OTHER DIRECT EXPENSES</b>	
				<b>\$ -</b>	
<b>OUTSIDE SERVICES</b>					
COMPANY	FUNCTION		TOTAL		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
				<b>TOTAL OUTSIDE SERVICES</b>	
				<b>\$ -</b>	
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEE</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 10,655	
				<b>TOTAL FEES</b>	
				<b>\$ 10,655</b>	
				<b>TOTAL COST</b>	
				<b>\$ 117,206</b>	

[illegible]



**Cost Proposal Worksheet**

COMPANY:		SCOPE OF WORK:		DATE:	
Earth Mechanics, Inc.		COS Task 10 - Geotechnical		05/03/2010	
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:			
Cherry and Citrus at I-10		Geotechnical Engineering Design			
<b>DIRECT LABOR</b>					
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT	
L. Cheang, Principal	Project Management and QA/QC	20.0	\$ 65.50	\$ 1,310.00	
R. Pirathiviraj, Sen Staff Eng.	Analysis and Report	158.0	\$ 32.50	\$ 5,135.00	
R. Jie, Technician	Field Investigation and Lab Testing	45.0	\$ 38.50	\$ 1,732.50	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
<b>TOTAL HOURS</b>		<b>223.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 8,178</b>
<b>MULTIPLIERS</b>					
<b>ESCALATION</b>		0.00% (of Total Direct Labor)		\$ -	
<b>OVERHEAD</b>		165.00% (of Total Direct Labor + Escalation)		\$ 13,493	
<b>PAYROLL ADDITIVES</b>		0.00% (of Total Direct Labor + Escalation)		\$ -	
				<b>TOTAL MULTIPLIERS</b>	<b>\$ 13,493</b>
<b>OTHER DIRECT EXPENSES</b>					
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT	
Laboratory Testing	LS	1	\$ 1,600.00	\$ 1,600.00	
Reproduction, Printing	LS	1	\$ 20.00	\$ 20.00	
Communication, Shipping	LS	1	\$ 20.00	\$ 20.00	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 1,640</b>	
<b>OUTSIDE SERVICES</b>					
COMPANY	FUNCTION		TOTAL		
2R Drilling, Pacific Drilling	Borehole Excavation		\$ 1,826.00		
Hi-Way Safety	Field Exploration/Traffic Control		\$ 14,110.00		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
			\$ -		
<b>TOTAL OUTSIDE SERVICES</b>				<b>\$ 15,936</b>	
<b>FEES</b>					
<b>OUTSIDE SERVICES ADMIN FEE</b>		0.00% (of Total Outside Services)		\$ -	
<b>FIXED FEE</b>		10.00% (of Total Direct Labor + Total Multipliers)		\$ 2,167	
				<b>TOTAL FEES</b>	<b>\$ 2,167</b>
				<b>TOTAL COST</b>	<b>\$ 41,413</b>



**Cost Proposal Worksheet**

<b>COMPANY:</b>		<b>SCOPE OF WORK:</b>		<b>DATE:</b>	
TYLER		CD3 Task 11 - Landscape PA&ED		05/03/2010	
<b>PROJECT:</b>		<b>MILESTONE/PHASE/PROJECT SUMMARY:</b>			
Citrus and Cherry at I-10		Landscape PA&ED			

<b>DIRECT LABOR</b>					
PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT	
Gary Antonucci	Project Manager	12.0	\$ 87.50	\$ 1,050.00	
Jeff Kim	Project Engineer	56.0	\$ 57.05	\$ 3,194.80	
Patrick Bactor	Transportation Engineer	50.0	\$ 43.45	\$ 2,172.50	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0		\$ -	
		0.0	\$ -	\$ -	
		0.0	\$ -	\$ -	
<b>TOTAL HOURS</b>		<b>118.0</b>	<b>TOTAL DIRECT LABOR</b>		<b>\$ 6,417</b>

<b>MULTIPLIERS</b>		
ESCALATION	0.00% (of Total Direct Labor)	\$ -
OVERHEAD	150.00% (of Total Direct Labor + Escalation)	\$ 9,626
PAYROLL ADDITIVES	0.00% (of Total Direct Labor + Escalation)	\$ -
<b>TOTAL MULTIPLIERS</b>		<b>\$ 9,626</b>

<b>OTHER DIRECT EXPENSES</b>				
ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
	LS	1	\$ -	\$ -
Reproduction, Printing	LS	1	\$ -	\$ 1,500.00
	LS	1	\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 1,500</b>

<b>OUTSIDE SERVICES</b>		
COMPANY	FUNCTION	TOTAL
LCI	Landscape Architects	\$ 38,562.93
OPC	Right of way data sheets	\$ 4,000.00
Parsons	ISA Checklists	\$ 3,000.00
		\$ -
		\$ -
		\$ -
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ 45,563</b>

<b>FEES</b>		
OUTSIDE SERVICES ADMIN FEI	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 1,604
<b>TOTAL FEES</b>		<b>\$ 1,604</b>
<b>TOTAL COST</b>		<b>\$ 84,711</b>

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**Cost Proposal Worksheet**

COMPANY:	SCOPE OF WORK:	DATE:
LCI	CO3 Task 11 - Landscape PA&ED	06/03/2010
PROJECT:	MILESTONE/PHASE/PROJECT SUMMARY:	
Citrus and Cherry at I-10	Landscape PA&ED	

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
Lynn Capouya	Principal	4.0	\$ 84.14	\$ 336.56
Tim Mann	Project Manager	60.0	\$ 46.88	\$ 2,812.80
Soda Pay	Landscape Architect	198.0	\$ 38.47	\$ 7,617.06
Sam Ork	Draftsman 1	88.0	\$ 26.45	\$ 2,327.60
Susan Martin	Administration	22.0	\$ 20.00	\$ 440.00
				\$ -
				\$ -
				\$ -
				\$ -
			\$ -	\$ -
			\$ -	\$ -
<b>TOTAL HOURS</b>		<b>372.0</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$ 13,534</b>

**MULTIPLIERS**

ESCALATION	0.00% (of Total Direct Labor)	\$ -
OVERHEAD	155.00% (of Total Direct Labor + Escalation)	\$ 20,978
PAYROLL ADDITIVES	0.00% (of Total Direct Labor + Escalation)	\$ -
<b>TOTAL MULTIPLIERS</b>		<b>\$ 20,978</b>

**OTHER DIRECT EXPENSES**

ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
	LS	1	\$ -	\$ -
Reproduction, Printing	LS	1	\$ 600.00	\$ 600.00
	LS	1	\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 600</b>

**OUTSIDE SERVICES**

COMPANY	FUNCTION	TOTAL
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ -</b>

**FEES**

OUTSIDE SERVICES ADMIN FEE	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 3,451
<b>TOTAL FEES</b>		<b>\$ 3,451</b>
<b>TOTAL COST</b>		<b>\$ 38,563</b>

Manhour Worksheet		SCOPE OF WORK					DATE
COMPANY:		COPART 14 - LANDSCAPE PA&ED					05/03/2010
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:					
	Citrus and Cherry at I-10	Landscape PA&ED					
		245.28	136.65	112.14	77.1	58.3	
Task No.	Task Activity	Landscaping	Planting	Blueberry	Shrub	Tree	Total Hours
11	Landscape PA&ED (Project Management)						
	Review PDPM Guidance Standards	8.0		8.0			16.0
	Develop Project Report	4.0	12.0	80.0		22.0	118.0
	Development Project Cost Estimate		8.0	24.0	4.0		36.0
	Coordination of Consultant Reports						
	Development of Preliminary Design Plan (Design Concept)		6.0	38.0	60.0		104.0
	Coordinate Draft Cooperative Agreement(s)						
	Submit Report for Draft Circulation			8.0	8.0		16.0
	Incorporate Comments from Draft Circulation		6.0	16.0			22.0
	Submit Report for Final Circulation			8.0	8.0		16.0
	Incorporate Comments from Final Circulation		8.0	8.0			16.0
	Final Submittal			8.0	8.0		16.0
	Attend PDT/Report Review Meetings		12.0				12.0
ALL	TOTALS	4.0	60.0	198.0	88.0	22.0	372.0

**Cost Proposal Worksheet**

COMPANY:	Parsons	DATE:	
PROJECT:	I-10/Cherry and Citrus Interchanges Project - PS&E Phase		05/03/2010
	CO3 - TASK 12 - GENERAL PROJECT MANAGEMENT		

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
Cheah	Project Management	40	\$ 83.00	\$ 3,320.00
Cooper	Sr Transportation Engineer	0	\$ 45.87	\$ -
Lees	Sr Transportation Engineer	0	\$ 52.30	\$ -
Pazdan	Sr Transportation Engineer	0	\$ 51.27	\$ -
Kwan	Transportation Engineer	0	\$ 38.56	\$ -
Tan	Transportation Engineer	0	\$ 33.83	\$ -
Wong	Transportation Engineer	0	\$ 32.13	\$ -
Saikali, W	Transportation Engineer	0	\$ 27.88	\$ -
Saikali, Y	Sr Designer	0	\$ 41.56	\$ -
Bottcher	Sr Drainage Engineer	0	\$ 69.49	\$ -
Galvan	Sr Drainage Engineer	0	\$ 50.62	\$ -
Fawaz	Sr Drainage Engineer	0	\$ 56.25	\$ -
Chua	Drainage Engineer	0	\$ 38.37	\$ -
Medina	Drainage Engineer	0	\$ 32.81	\$ -
Perez	Sr Traffic/Signal Engineer	0	\$ 61.78	\$ -
Abraham	Sr Traffic/Signal Engineer	0	\$ 43.81	\$ -
Weibel	Traffic/Signal Engineer	0	\$ 38.50	\$ -
Powell	Transportation Engineer	0	\$ 34.50	\$ -
McNeil	Sr Transportation Engineer	0	\$ 48.21	\$ -
Boddapati	A. Transportation Engineer	0	\$ 28.93	\$ -
Petterson	Sr Transportation Engineer	0	\$ 39.64	\$ -
Dulor	Sr Bridge Engineer	0	\$ 61.30	\$ -
Sandrasegaram	Sr Bridge Engineer	0	\$ 57.51	\$ -
Johnson	SR CADD Designer	0	\$ 47.49	\$ -
Rudd	Clerical	16	\$ 28.40	\$ 454.40
<b>TOTAL HOURS</b>		<b>56.0</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$ 3,774</b>

**MULTIPLIERS**

ESCALATION	(of Total Direct Labor)	\$ -
OVERHEAD	150.00% (of Total Direct Labor + Escalation)	\$ 5,662
PAYROLL ADDITIVES	(of Total Direct Labor + Escalation)	\$ -
<b>TOTAL MULTIPLIERS</b>		<b>\$ 5,662</b>

**OTHER DIRECT EXPENSES**

ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
Reproduction	LS	1		\$ -
Copying	LS	1	\$ -	\$ -
Transportation/Travel	LS	1	\$ 1,000.00	\$ 1,000.00
Special Deliveries	LS	1	\$ -	\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ 1,000</b>

**OUTSIDE SERVICES**

COMPANY	FUNCTION	TOTAL
		\$ -
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ -</b>

**FEES**

OUTSIDE SERVICE	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 944
<b>TOTAL FEES</b>		<b>\$ 944</b>

**TOTAL COST \$ 11,380**

Manhour Worksheet														
COMPANY:		SCOPE OF WORK:												
PARSONS		CO3 - TASK 12 - GENERAL PROJECT MANAGEMENT												
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:												
I-10/Cherry & Citrus ICs														
No.	TASK ACTIVITY	PM	Sr Transportation Engineer Cooper	Sr Transportation Engineer Lees	Sr Transportation Engineer Hudson	Transportation Engineer Kwan	Transportation Engineer Tan	Transportation Engineer Wong	Transportation Engineer Sakai, W	Sr Transportation Engineer Pettersen	Sr Bridge Engineer Duber	SR CADD Designer Johnson	Clerical Rudd	Total Hours
12	General Project Management													
	Meetings & Agency Coordination	40.0												48.0
	Preparation of Exhibit and Presentations													8.0
	Subtotal Project Management	40.0												56.0
	Subtotal for I-10/Cherry Ave Only													
				</										



**Cost Proposal Worksheet**

COMPANY:	SCOPE OF WORK:	DATE:
TYLjn	CD-3 Task 12- Capital Project Management	05/03/2010
PROJECT:	MILESTONE/PHASE/PROJECT SUMMARY:	
Cherry/Citrus at I-10	Summary	

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
Gary Antonucci	Project Manager	60.0	\$ 87.50	\$ 5,250.00
Staff	QA/QC	60.0	\$ 100.00	\$ 6,000.00
Jim Rucker	Supervising Bridge Engineer	0.0	\$ 69.85	\$ -
Rodrigo Gonzalez	Supervising Transportation Engineer	0.0	\$ 70.90	\$ -
Jeff Kim	Senior Transportation Engineer	0.0	\$ 57.05	\$ -
Staff	Senior Bridge Engineer	0.0	\$ 55.20	\$ -
Staff	Bridge Engineer	0.0	\$ 44.90	\$ -
Staff	Assistant Bridge Engineer	0.0	\$ 30.69	\$ -
Staff	Transportation Engineer	0.0	\$ 44.00	\$ -
Staff	Assistant Transportation Engineer	0.0	\$ 43.45	\$ -
Staff	CADD Technician (Civil)	0.0	\$ 21.00	\$ -
Staff	CADD Technician (Bridge)	0.0	\$ 32.70	\$ -
Staff	Clerical	0.0	\$ 15.00	\$ -
<b>TOTAL HOURS</b>		<b>120.0</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$ 11,250</b>

**MULTIPLIERS**

ESCALATION	0.00% (of Total Direct Labor)	\$ -
OVERHEAD	150.00% (of Total Direct Labor + Escalation)	\$ 16,875
PAYROLL ADDITIVES	0.00% (of Total Direct Labor + Escalation)	\$ -
<b>TOTAL MULTIPLIERS</b>		<b>\$ 16,875</b>

**OTHER DIRECT EXPENSES**

ITEM	UNIT	QUANTITY	UNIT COST	AMOUNT
Reproduction	LS	1	\$ 10,000.00	\$ -
Copying	LS	1		\$ -
Transportation/Travel	LS	1		\$ -
Special Deliveries	LS	1		\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$ -</b>

**OUTSIDE SERVICES**

COMPANY	FUNCTION	TOTAL
Associated Engineers	Surveying	
Birge	Utilities and Drainage	
Earth Mechanics Inc	Geotechnical	
Lynn Capouya, Inc	Landscape	
Parsons Transportation Group	Highway/Railroad/Water Quality	
Paragon Partners, Ltd	Right of Way	
		\$ -
<b>TOTAL OUTSIDE SERVICES</b>		<b>\$ -</b>

**FEES**

OUTSIDE SERVICES ADMIN FEE	0.00% (of Total Outside Services)	\$ -
FIXED FEE	10.00% (of Total Direct Labor + Total Multipliers)	\$ 2,813
<b>TOTAL FEES</b>		<b>\$ 2,813</b>
<b>TOTAL COST</b>		<b>\$ 30,938</b>

Manhour Worksheet						
SCOPE OF WORK:						DATE:
2013 Task 12 General Project Management						05/03/2010
MILESTONE/PHASE/PROJECT SUMMARY:						
<b>Summary</b>						
TASK NO.	TASK ACTIVITY	Project Manager	Quality Control	Task Coordination	Reporting	Total Hours
12	GENERAL PROJECT MANAGEMENT	60.0	60.0			120.0
					<b>TOTALS</b>	<b>120.0</b>

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SANBAG Contract No. **C08053-1**  
by and between San Bernardino County Transportation Authority and The County of San Bernardino and City of Fontana  
for I-10 / Citrus Avenue Interchange Design Cooperative Amendment

FOR ACCOUNTING PURPOSES ONLY						
<input type="checkbox"/> Payable <input checked="" type="checkbox"/> Receivable	Vendor Contract # _____ Vendor ID <u>SBCO/FONT CI</u>	Retention: <input type="checkbox"/> Yes _____ % <input checked="" type="checkbox"/> No	<input type="checkbox"/> Original <input checked="" type="checkbox"/> Amendment			
Notes:						
Original Contract: \$ <u>3,869,157</u>  Contingency / Allowance Amount \$ <u>65,580</u>		Previous Amendments \$ _____ Previous Amendments Contingency / Allowance Total: \$ _____ Current Amendment: \$ <u>853,491</u> Current Amendment Contingency / Allowance: \$ <u>85,349</u>				
Contingency Amount requires specific authorization by Task Manager prior to release.						
<b>Contract TOTAL ►</b>			<b>\$ <u>4,873,577</u></b>			
* Funding sources remain as stated on this document unless and until amended by proper authority. Funding sources are those which are ultimately responsible for the expenditure. ▼ Include funding allocation for the original contract or the amendment						
Main Task/ Project	Level 1	Level 2	Cost Code/ Object	Grant ID/ Supplement	Funding Sources/ Fund Type (Measure I, STP, CMAQ, etc.)	Amounts for Contract Total or Current Amndmnt Amt
<u>826</u>	<u>610</u>	<u>000</u>	<u>52005</u>	<u>41403</u>	<u>Local SBCO - Citrus</u>	\$ <u>9,388</u>
<u>826</u>	<u>610</u>	<u>000</u>	<u>52005</u>	<u>51801</u>	<u>Local FONT CI</u>	\$ <u>929,452</u>
Original Board Approved Contract Date: <u>5/7/08</u>				Contract Start: <u>5/7/08</u>		Contract End: <u>12/31/14</u>
New Amend. Approval (Board) Date: <u>7/7/10</u>				Amend. Start: <u>7/8/10</u>		Amend. End: <u>12/31/14</u>
Allocate the <b>Total Contract Amount</b> or <b>Current Amendment</b> amount between <b>Approved Budget Authority</b> in the current year and <b>Future Fiscal Year(s) Unbudgeted Obligation</b> .						
Approved Budget Authority ►		Fiscal Year: <u>10/11</u> \$		Future Fiscal Year(s) – Unbudgeted Obligation ►		\$0
<input checked="" type="checkbox"/> Budget authority for this contract currently exists in Task No. <u>826</u> (C-Task may be used here.). <input type="checkbox"/> A budget amendment is required. A Budget Amendment Request is attached.						

CONTRACT MANAGEMENT	
Check all applicable boxes:	
<input checked="" type="checkbox"/> Intergovernmental	<input type="checkbox"/> Private
<input type="checkbox"/> Disadvantaged Business Enterprise (DBE)	<input type="checkbox"/> Underutilized DBE (UDBE)
<input type="checkbox"/> Federal Funds	<input type="checkbox"/> State/Local Funds

Task Manager: Garry Cohoe	Contract Manager: Chad Costello
 Task Manager Signature	 Contract Manager Signature
 Chief Financial Officer Signature	 Chief Financial Officer Signature
Date: <u>6/3/10</u>	Date: <u>6/3/10</u>
Date: <u>6/3/10</u>	Date: <u>6/3/10</u>

COOPERATIVE AGREEMENT NO. C08053-1 AMENDMENT

BETWEEN THE

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY,  
THE COUNTY OF SAN BERNARDINO AND THE CITY OF FONTANA

FOR THE

I-10/CITRUS AVENUE INTERCHANGE IMPROVEMENTS PROJECT

**This Amendment No. 1 to Contract No. C08053 is entered into this 7<sup>th</sup> day of July, 2010 by and between the County of San Bernardino ("COUNTY"), the City of Fontana ("CITY"), and the San Bernardino County Transportation Authority ("AUTHORITY"):**

WITNESSETH

WHEREAS, AUTHORITY, CITY, and COUNTY entered into Contract No. 08053 ("Contract") on May 7, 2008 to cooperate and jointly participate in a project to prepare Plans, Specifications and Estimate (PS&E) for I-10/Citrus Avenue Interchange Improvements, hereinafter referred to as "PROJECT"; and

WHEREAS, PROJECT is located in the City of Fontana and in the County of San Bernardino; and

WHEREAS, PROJECT will not be combined with I-10/Cherry Interchange Improvements and I-10 Auxiliary Lanes Addition between Etiwanda and Riverside Avenues projects, for construction; and

WHEREAS, AUTHORITY, COUNTY AND CITY agree to amend this design cooperative agreement due to the additional work described within Attachment A; and

WHEREAS, the estimated cost of PS&E for PROJECT is \$4.9 million.

NOW, THEREFORE, IT IS MUTUALLY AGREED to amend the Contract in the following manner:

1. Pursuant to Article 4.9 of the Contract, the Parties agree that the additional work described in Attachment "A" to this Amendment, which is hereby made a part of the Contract, is beyond the original Contract scope of work and is a necessary part of the PROJECT and that the additional design costs incurred in completing the additional work will be allocated in accordance with the percentage allocation provided in the original agreement C08053.
2. COUNTY agrees to fund 1% (estimated at \$48,735) of the actual PS&E cost incurred by AUTHORITY for PROJECT including, but not limited to, costs



incurred for the preparation of all contract documents necessary for construction, except for AUTHORITY staffing costs.

3. CITY agrees to fund 99% (estimated at \$4,824,842) of the actual PS&E cost incurred by AUTHORITY for PROJECT, including, but not limited to, costs incurred for the preparation of all contract documents necessary for construction, except for AUTHORITY staffing costs.
4. In no event shall COUNTY's or CITY's funding share of the actual PS&E costs incurred, estimated as \$48,735 and \$4,824,842 respectively, exceed these stated amounts absent an additional written amendment to the Agreement approved by all parties.
5. CITY and COUNTY shall reimburse AUTHORITY within 30 days of receipt of invoice from AUTHORITY.
6. A separate Cooperative Agreement will be required to cover responsibilities and funding for the construction phases of PROJECT including necessary service fees during construction.
7. Except as amended by this Amendment, all other provisions of the Contract shall remain in full force and effect.
8. This Agreement may be signed in counterparts, each of which shall constitute an original.

Signatures are on the following page.

**San Bernardino County**  
**Transportation Authority**

**City of Fontana**

By: \_\_\_\_\_  
Brad Mitzelfelt, President  
SANBAG Board of Directors

By: \_\_\_\_\_  
Mark Nuaimi, Mayor  
City of Fontana

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**San Bernardino County Board of Supervisors**

By: \_\_\_\_\_  
Gary C. Ovitt  
Chairman

Date: \_\_\_\_\_

APPROVED AS TO FORM AND  
PROCEDURE:

APPROVED AS TO FORM AND  
PROCEDURE:

By: \_\_\_\_\_  
Jean-Rene Basle  
SANBAG County Counsel

By: \_\_\_\_\_  
City Attorney

Date: \_\_\_\_\_

Date: \_\_\_\_\_

APPROVED AS TO FORM AND  
PROCEDURE:

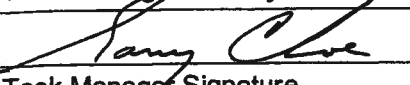
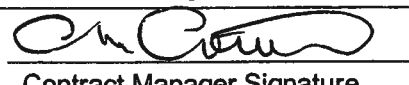
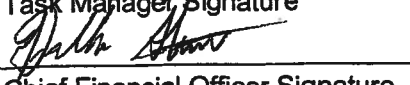
By: \_\_\_\_\_  
Scott Runyan  
County Counsel

Date: \_\_\_\_\_

SANBAG Contract No. **C08055-1**  
by and between San Bernardino County Transportation Authority and The County of San Bernardino and City of Fontana  
for I-10 / Cherry Avenue Interchange Design Cooperative Amendment

FOR ACCOUNTING PURPOSES ONLY						
<input type="checkbox"/> Payable	Vendor Contract # _____	Retention:	<input type="checkbox"/> Original			
<input checked="" type="checkbox"/> Receivable	Vendor ID <u>SBCO/FONT CI</u>	<input type="checkbox"/> Yes _____ % <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Amendment			
Notes: As part of this amendment, an additional \$277,289 SANBAG Measure funds will be budgeted with these County funds as a payable on contract amendment C08050-1.						
Original Contract: \$ <u>3,187,738</u>		Previous Amendments \$ _____				
		Previous Amendments \$ _____				
		Contingency / Allowance Total:				
Contingency / Allowance Amount \$ <u>54,030</u>		Current Amendment: \$ <u>448,144</u>				
		Current Amendment Contingency / Allowance: \$ <u>44,815</u>				
Contingency Amount requires specific authorization by Task Manager prior to release.						
<b>Contract TOTAL ►</b>						<b>\$ <u>3,734,727</u></b>
* Funding sources remain as stated on this document unless and until amended by proper authority. Funding sources are those which are ultimately responsible for the expenditure.						
▼ Include funding allocation for the original contract or the amendment						
Main Task/ Project	Level 1	Level 2	Cost Code/ Object	Grant ID/ Supplement	Funding Sources/ Fund Type (Measure I, STP, CMAQ, etc.)	Amounts for Contract Total or Current Amndmnt Amt
<u>826</u>	<u>610</u>	<u>000</u>	<u>52005</u>	<u>41404</u>	<u>Local SBCO-Cherry</u>	<u>\$ 492,958</u>
Original Board Approved Contract Date:				<u>5/7/08</u>	Contract Start: <u>5/7/08</u>	Contract End: <u>12/31/14</u>
New Amend. Approval (Board) Date:				<u>7/7/10</u>	Amend. Start: <u>7/8/10</u>	Amend. End: <u>12/31/14</u>
Allocate the <b>Total Contract Amount</b> or <b>Current Amendment</b> amount between <b>Approved Budget Authority</b> in the current year and <b>Future Fiscal Year(s) Unbudgeted Obligation</b> .						
<b>Approved Budget Authority ►</b>		Fiscal Year: 10/11 \$ <u>0</u>		<b>Future Fiscal Year(s) – Unbudgeted Obligation ►</b>		\$ <u>0</u>
<input checked="" type="checkbox"/> Budget authority for this contract currently exists in Task No. <u>826</u> (C-Task may be used here.).						
<input type="checkbox"/> A budget amendment is required. A Budget Amendment Request is attached.						

CONTRACT MANAGEMENT	
Check all applicable boxes:	
<input checked="" type="checkbox"/> Intergovernmental	<input type="checkbox"/> Private
<input type="checkbox"/> Disadvantaged Business Enterprise (DBE)	<input type="checkbox"/> Underutilized DBE (UDBE)
<input type="checkbox"/> Federal Funds	<input type="checkbox"/> State/Local Funds

Task Manager: Garry Cohoe		Contract Manager: Chad Costello	
 Task Manager Signature	<u>6/3/10</u> Date	 Contract Manager Signature	<u>6/3/10</u> Date
 Chief Financial Officer Signature	<u>6/3/10</u> Date		

COOPERATIVE AGREEMENT NO. C08055-1 AMENDMENT  
BETWEEN THE  
SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY,  
THE COUNTY OF SAN BERNARDINO AND THE CITY OF FONTANA  
FOR THE  
I-10/CHERRY AVENUE INTERCHANGE IMPROVEMENTS PROJECT

**This Amendment No. 1 to Contract No. C08055 is entered into this 7<sup>th</sup> day of July, 2010 by and between the County of San Bernardino ("COUNTY"), the City of Fontana ("CITY"), and the San Bernardino County Transportation Authority ("AUTHORITY"):**

WITNESSETH

WHEREAS, AUTHORITY, CITY, and COUNTY entered into Contract No. 08055 ("Contract") on June 12, 2008 to cooperate and jointly participate in a project to prepare Plans, Specifications and Estimate (PS&E) for I-10/Cherry Avenue Interchange Improvements, hereinafter referred to as "PROJECT; and

WHEREAS, PROJECT is located in the City of Fontana and in the County of San Bernardino; and

WHEREAS, PROJECT will not be combined with I-10/Cherry Interchange Improvements and I-10 Auxiliary Lanes Addition between Etiwanda and Riverside Avenues projects, for construction; and

WHEREAS, AUTHORITY, COUNTY AND CITY agree to amend this design cooperative agreement due to the additional work described within Attachment A; and

WHEREAS, the estimated cost of PS&E for PROJECT is \$5.8 million.

NOW, THEREFORE, IT IS MUTUALLY AGREED to amend the Contract in the following manner:

1. Pursuant to Article 4.9 of the Contract, the Parties agree that the additional work described in Attachment "A" to this Amendment, which is hereby made a part of the Contract, is beyond the original Contract scope of work and is a necessary part of the PROJECT and that the additional design costs incurred in completing

the additional work will be allocated in accordance with the percentage allocation provided in the original agreement C08055.

2. COUNTY agrees to fund 64% (estimated at \$3,734,727) of the actual PS&E cost incurred by AUTHORITY for PROJECT including, but not limited to, costs incurred for the preparation of all contract documents necessary for construction, except for AUTHORITY staffing costs.
3. AUTHORITY agrees to fund 36% (estimated at \$2,100,784) of the actual PS&E cost incurred by AUTHORITY for PROJECT, including, but not limited to, costs incurred for the preparation of all contract documents necessary for construction, except for AUTHORITY staffing costs.
4. In no event shall COUNTY's or AUTHORITY's funding share of the actual PS&E costs incurred, estimated as \$3,734,727 and \$2,100,784 respectively, exceed these stated amounts absent an additional written amendment to the Agreement approved by all parties.
5. CITY and COUNTY shall reimburse AUTHORITY within 30 days of receipt of invoice from AUTHORITY.
6. A separate Cooperative Agreement will be required to cover responsibilities and funding for the construction phases of PROJECT including necessary service fees during construction.
7. Except as amended by this Amendment, all other provisions of the Contract shall remain in full force and effect.
8. This Agreement may be signed in counterparts, each of which shall constitute an original.

Signatures are on the following page.

**San Bernardino County  
Transportation Authority**

By: \_\_\_\_\_  
Brad Mitzelfelt, President  
SANBAG Board of Directors

Date: \_\_\_\_\_

**City of Fontana**

By: \_\_\_\_\_  
Mark Nuaimi, Mayor  
City of Fontana

Date: \_\_\_\_\_

**San Bernardino County Board of Supervisors**

By: \_\_\_\_\_  
Gary C. Ovitt  
Chairman

Date: \_\_\_\_\_

**APPROVED AS TO FORM AND  
PROCEDURE:**

By: \_\_\_\_\_  
Jean-Rene Basle  
SANBAG County Counsel

Date: \_\_\_\_\_

**APPROVED AS TO FORM AND  
PROCEDURE:**

By: \_\_\_\_\_  
City Attorney

Date: \_\_\_\_\_

**APPROVED AS TO FORM AND  
PROCEDURE:**

By: \_\_\_\_\_  
Scott Runyan  
County Counsel

Date: \_\_\_\_\_